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Practical Observations on Mercurial Fumigation. By A. GIBSON, M. D. Staff Surgeon.

(From the London Medical and Physical Journal.)

Of all the duties of the military surgeon, the most constant and unsatisfactory is that which calls upon him to administer to the chronic forms of disease, usually classed in our medical Returns under the specious term "Anomalous." It is the obstinacy of these, and their perplexing variety, which, no doubt, so long ago conferred the epithet opprobrium on many of them; for, after having withstood the most accepted judicious medical treatment, and been unprofitably subjected to the not-nor benefits, in many instances, of long ease and nursing, they have usually at last been abandoned, to be ranked among the incurables, and their victims exiled beyond the pale of science.

But it has, doubtless, been observed, by every medical officer of a certain military experience in India, how frequently those men again offer themselves to the public service, full of energy and activity, and free from every physical disqualification, amply competent (as they afterwards prove) to its most arduous duties. This observation was rendered particularly remarkable last year, whilst in Rhandiesh, by the return of a

Sepoy, after a short leave of absence, supple and active, although emaciated, who had left the hospital crippled and nearly helpless. The fact was too striking not to make an impression, and academic honours blushed for a moment to be outdone by some illiterate Paracelsus of a Mahratta hamlet. It was very evident, from the state of the gums and mouth in this case, that mercury had been used in some form, which had acted upon them with more severity than, in similar cases, is thought by British practitioners to be required, and that the debility at the same time was by no means such as would have followed any course of mercury prescribed, *secundum artem*, to produce equal effects. But the Sepoy was too ignorant, or his *hukkheem* too cunning; for I could not ascertain that mercury had actually been given, but only that he had been exposed to fire and smoke, and drank some medicated decoction, during which his mouth had become very sore, and he himself rapidly convalescent.

It was on being foiled in the treatment of some of the following cases, that I was led to consult the judgment of Dr. Milne, the superintending surgeon of the division, on the probable good effects to be derived from mercurial fumigation, who, ever unwearied in his zeal for the promotion of medical improvement, procured for me a skilled native, to whose method alone I entrusted my earlier cases; which, with others, equally fortunate, in my own immediate charge, form the subject of this communication.

Cases successfully treated by Mercurial Fumigation.

Koondalle Sackpal, Sepoy, admitted into hospital, with rheumatism, on the 24th of June. Pain greatest in the right elbow-joint, which was considerably swollen and stiff. All the usual means recommended in such instances failing, mercurial fumigations were tried the beginning of August, which being administered fourteen times, or morning and evening, for seven days, he was returned for duty on the 15th of that month; being detained in hospital the last few days, till salivation ceased, and the mouth became well.

Balnac Darnac, admitted on the 28th of June, with rheumatism. Pains general, but greatest in the ankle-joints, which were swollen and rigid; the swelling and stiffness extending over the foot to the toe. The usual remedies failing, fumigations were begun the beginning of August, applied fourteen times; and on the 11th of July he was dismissed.

Doon Sing, Sepoy, admitted into hospital, with syphilis, on

the 17th of February. A phagedenic chancre, of a most obstinate and threatening nature, was the most difficult primary symptom to treat. The usual mercurial course was followed by general pains, and all the untoward symptoms denominated "anomalous." Unsuccessful trials were made of the alteratives considered the most active,—such as oxy. mur. hydr., pil. hydr., sarsaparille, ipecacuanha, alone and in many varied combinations with opium; blisters, liniments, cupping, frictions, and bandaging, were long and ineffectually used. He was bedrid, and his general health greatly impaired, from suffering and want of rest, when mercurial fumigations were resorted to. He is, (August 21st,) after fourteen applications, walking actively about the hospital, complaining only of a sore mouth, and very slight stiffness of the ankle-joints; which, considering the dampness of the season, is not to be wondered at.

October 27th.—Perfectly well.

Goordat Sing, Sepoy, admitted, with venereal, on the 28th of February. The early history of this patient is very similar to that of Doon Sing. The secondary character which his disease assumed was so much the more formidable, however, from swellings that from time to time appeared on different parts of his body. The principles of the treatment were the same. The following were the prominent symptoms and appearances in the beginning of August, when mercurial fumigations were used:—General health greatly impaired; bowels irregular; appetite bad; habit emaciated; occasional nocturnal attacks of fever, with intense thirst; constant lassitude and listlessness; considerable enlargement of the os calcis; swelling of the digital extremity of the middle metacarpal bone, and a bump on the spine of the scapula; these enlargements acutely sensible to the touch. As the system became affected, after a few fumigations, all external marks of disease began to vanish; the pains, from the first, became blunted; and, after seven days use of the remedy, he had no complaints. At present (August 21st,) he is active and supple, and, but for the inclemency of the season, would be on the convalescent list.

October 27th.—Stout and well.

Shaik Moiddeen, Sepoy, admitted with rheumatism, on the 9th of May. Painful swelling and stiffness of the joints of the lower extremities; for which the usual active and palliative means were vainly used. Commenced fumigations the beginning of August, which were employed, as in the

other cases, fourteen times. Was severely salivated. Dismissed, cured.

Rodrigues—was admitted on the 1st of August, with nocturnal pains, and a scabby eruption of the legs and arms. Was lately under mercury for a virulent chancre, for the usual time. After seven days' fumigation, the pains subsided, the eruption disappeared, and he was dismissed.

N. B.—September 30th. This patient, a poor man, left the hospital in damp, rainy weather, whilst under mercury, and has since sought relief for pains, most probably to be thus accounted for ; and having been again successfully fumigated, is now free from complaint.

The following cases formed the subject of a second communication to the superintending surgeon.

August.—A female, aged seventeen. Pains and swelling of the lower extremities, (the former, worst during the night;) general pains and stiffness of the joints ; great difficulty in rising, when once seated ; emaciated ; colour sickly ; appetite bad. Has been ailing above a year. Was fumigated fourteen times ; mouth became only tender, salivation very trifling. Cured.

Remarks.—Although the history of this female was imperfect, the symptoms afford grounds for suspecting a venereal taint, but she persists in never (to her knowledge) having been diseased. But, venereal, or rheumatic, the case is valuable, the cure being complete.

A commissariat servant, was supposed to be cured of chancres about two months ago, after the usual course of mercury, in the form of pill and friction. For a week past, has been troubled with a thickening and dryness of the cuticle, on the points and under the nails of his fingers, which peels off without discharge. A dry eruption, also, between the fingers and toes, and on the palms and soles, which detaches itself, in like manner, in the form of thickened cuticle ; in some spots on the latter leaving a little rawness ; a suspicious excoriation on the inside of the prepuce ; appearance unhealthy. Used fumigation fourteen times. Mouth made very sore, and considerable salivation. Cured.

Remarks.—This Portuguese being of irregular habits, it is probable that the appearances described were the sequelæ of a prior and more confirmed pox than the primary symptoms alluded to ; of which he was, in all probability, as perfectly cured as he could be, in a diseased habit. The mouth became so sore, that the head was latterly excluded during the progress of fumigation.

August.—A European. A general, vesicular, watery eruption over the body, itchy, and disturbing rest; a swelling in the groin, of long standing, and glandular swelling on the right side of the neck; phymosis, and discharge; general health considerably affected; appetite bad; sleepless; spirits greatly depressed. Has used mercury at various times, for suspected venereal, in the course of the last two years. The eruption first appeared between two and three months ago, for which ointment and washes of various kinds were applied. Latterly has been taking corrosive sublimate, and using mercurial frictions, with partial good effect on the eruption, but evidently with injury to the constitution. Fumigated fourteen times. Mouth sore, and salivated. Cured.

Remarks.—I fancy so obstinate a complication of symptoms cannot be assigned to any other cause than a latent venereal taint. A proof, perhaps, of the system, as well as the mouth, being early affected, or at least favourably influenced by the mercury, was the healthy sleep which followed four fumigations. This amendment, however, was disturbed by a little gastric derangement, which an aperient immediately rectified. The profuse sweating, which in every instance has attended the process for a shorter or longer period, in this case soon abated; and a slight irritation of the eyes, from the vapour, was the only inconvenience afterwards. The little phymosis remaining seems to be natural. The sore mouth occasioned some suffering; but the feelings of rude health and good spirits now enjoyed, are gratefully valued by this patient.

August.—A poor patient. Considerable inflammation, with swelling and slight suppuration, above the ossa nasi; two small ulcerated openings between the cheek and right ala, discharging matter and maggots; a purulent discharge from the nostrils; œdema of the lower eyelids, closing both eyes; shooting pains of the cranium. Was fumigated fourteen times. Mouth very sore, and severely salivated.

Dismissed, cured, 1st October.

Remarks.—It is not easy to imagine a more loathsome object than this poor old man presented, and, although no distinct history could be obtained, it may be denominated (I presume) a form of secondary syphilis. In so virulent a degree of inflammation, threatening such destruction, but little can be conceded to fomentations, which were conjoined in the treatment, or the few grains of champhor introduced into the ulcerated openings. The symptoms began to subside speedily, as the system very early became affected,—judging from the mouth, as well as the amendment. The mouth I thought

it prudent, for the sake of the neighbouring parts, to expose to the vapour, throughout the whole period of the fumigation, thereby inducing a more than usually profuse salivation, and rather severe ulceration of the mouth. The only other inconvenience experienced was a little gastric derangement, which an emetic and gentle aperient removed. A small cicatrix is the only exterior vestige of disease now remaining. The features are again natural ; and a slight purulent discharge from the nostrils, which remained for some time, was cured by a gently astringent injection.

September.—Blucgwatta, shop coolly. For the last ten months or so has been in delicate health, and suffering from general pains. Complaints originated in jaundice, for which he took mercury. Is at present thin and emaciated, and general health is greatly impaired. Has used medicines of various kinds at different times. Fumigated, three times daily, with the simple oxyde of mercury, for fourteen times. Mouth tender on the second day, when the pains began to give way. Cured.

Remarks.—This case of chronic rheumatism, besides the speedy relief procured, is only remarkable for the fumigatory employed,—the common blue-pill mass of our *Pharmacopœia*.

Dhondoo Parab, Sepoy, admitted on the 3d instant. Has concealed a venereal infection for fifteen days. Penis greatly swollen, tense and very painful, with gangrenous inflammation of the prepuce, which at one place is ulcerated through, and discharging a foul, bloody pus. A poultice was applied for two days ; but the progress of disease became so threatening to the penis, the fumigation was resorted to on the 5th. On the 6th, the mouth was tender, and the line of separation between the diseased and sound parts of the prepuce forming ; and, on the 7th, the prepuce dropped off, leaving a clean sore, as if circumcised, and exposing a deep foul ulceration in the body of the glans. Mouth very sore, and salivation profuse, partly from the native composition, and partly from the oxyde of mercury. Sore healed under simple dressing, and bluestone occasionally.

Remarks.—This case affords an instructive lesson of the good effects of speedily impregnating the system, in case of virulent primary venereal sore ; and the simplicity of the process by which this can be accomplished, and disease arrested. Fumigation may here be said to combine all the advantages derived from the general and topical application of mercury. This patient was returned to his duty early in October, with

no more mutilation than circumcision causes, although, on entering the hospital, the prognosis was so unfavourable. I have never seen circumcision by the knife heal more speedily; a fair test, it may be allowed, of all morbid taint in the system being destroyed.

OBSERVATIONS.—Having professed obligations to the native practice of mercurial fumigation, and adduced examples in support of its sanative efficacy, I shall now mention the composition which is in use in this corner of India, either for adoption in all its crudeness, or to benefit by the improvement of the more cultivated judgment and systematic experience of others.

Quicksilver 3*ijj.* = 1 iola.

Litharge (*moordarsing,*) 3*j.* 9*ijj.* = 1-2 iola.

Red lead (*sendoor,*) 3*ijj.*

Sulphate of copper 3*ss.*

The whole is well triturated together, for about two hours, with a quantity of the leaves of a jungle plant (*shetur,*) till formed into a mass, which is divided into fourteen portions, each the size of a small nutmeg, for use. One of these being laid on a small bit of tile, this is placed on live cow-dung, in an earthen dish, on the ground, between the patient's legs, who, in a sitting posture, is enveloped in a blanket. In about half an hour, the operation is over, the mercury being volatilised; and it is usual to employ this morning and evening.

The merits of such a compound must, I presume, be allowed to rest on its remedial virtues, and the nicety of analytical research forborne, in tenderness to its curative effects. But, although refinement may smile at its rudeness, and chemistry might detect much that is unscientific in a combination which such ingredients form, and perhaps caution, *a priori*, might shrink from its employment, it may be that the most fastidious will discover more that is extraneous than noxious in it. The following sentiments of Dr. Paris, in his "Pharmacologia," will be received as respectable support, at least of the latter part of this opinion. "Certain bodies," says Paris, "appear likewise to be incompatible with the compounds of lead, not from the chemical changes they induce, but from the contrary effects they produce upon the body: thus, mercury appears to invalidate their powers, and to counteract their effects, as we may have observed in treating saturnine colic."

But, far from advocating a remedy on any ground which sound principle and experiment do not support, and (in common, probably with most medical men,) rather inclined to be

sceptical and wary in any deviation from established truths, than become the partisan of equivocal hypothesis, it will be observed, in my latter cases, that a simple oxyde of mercury was employed. It was partly the dread of the saturnine portion of the composition which made me resort to this change; but whether, in cases of phadegena, or virulent venereal ulceration, requiring speedy arresting means, lead may not be a very essential fumigating principle, must be left to experiment to decide. As the simplest form, and one always to be procured, I employ the common blue-pill mass, in the quantity of half a drachm each time, which probably, both in quality and quantity, is not far removed from the native preparation of mercury.

It is not my intention, in this communication, to enter on the merits or demerits of a plan of using mercury, which (not more favoured than others) has at various times had its abettors and detractors: neither shall I further enlarge on its modified combination. The opportunity has been afforded me of proving it favourably, and the results of my success I have confidence in giving publicity to. I have also had occasion to know that, in respectable hands elsewhere, since my first cases were promulgated, it has generally fulfilled expectations; and, from this union of success, it has been favoured with the recommendation, to the gentlemen in his division, of one of our most experienced medical officers, who superintended my hospital. In venereal affections of every stage, it is in universal use among the native population, who (so far as I have observed, and can learn,) exhibit no deforming traces, either of its baneful consequences or inertness.

Therefore, from a certain satisfactory experience, and an anticipation of the valuable purposes, in morbid conditions of the system, to which so active an agent as mercurial fumigation, may be safely applied, I hope that this little practical sketch may be acceptable.

APPENDIX.

Extract of a Letter to JOHN MILNE, Esq. M. D. Superintending Surgeon, Konkan Division of the Army.

As every mean which can conduce to the melioration of human suffering has its intrinsic value, and, in proportion to its success, is equally estimable, whether the fruit of philosophical research, or whether derived from the simple experience of the unscientific native of the wilderness, I shall anticipate

my monthly Return, by sending a statement of the cases which had been subjected to mercurial fumigation.

It would be premature, and might seem too imaginative, perhaps, to deduce from so limited a sphere of experience the manifold advantages which time may yet demonstrate will accrue, from the introduction into our hospitals of a practice, which I am not aware has met with any attention in this country from scientific men. But, as the cases treated under my inspection were also under your superintendence, you are therefore well acquainted with their obstinacy and inveteracy, and will think (I do not doubt) that they afford ample grounds for encouraging the profession to the like practice, at least in similar cases of disease ; and may, therefore, be induced to bring the same to the notice of the Medical Board for this purpose.

It would betray unpardonable ignorance in any one to claim merit for suggesting a practice in any stage of the venereal disease, which the earliest physicians employed on the first appearance of that scourge in Europe, and which in later times has been recommended to the profession by M. Lalanette in France, and Abernethy in England. This is far from my ambition : nor, indeed, would the cases I have brought forward support any such vain pretension. But in anomalous diseases, whether considered the sequelæ of syphilis, or denominated mercurial or rheumatic, (examples of which mine may be called, and most native as well as European hospitals furnish annually a longer or shorter list, in their chronic state,) there is, for the present, a novelty in the practice to regular practitioners, although, probably, as ancient as the laws of Menu to the Vytians of Hindostan.

In contemplating the extension of advantages from the employment of mercury in the form of fumigation, one dwells on the frequent, perplexing, and often deplorable, instances, in which all our hopes rest on the antidotal influence of this mineral, if it could be but brought to act on the system; and the disheartening failure in this anxious endeavour, which every practitioner has at times to lament. These few testimonials, therefore, of the almost sudden influence on the constitution of a medicine so potent in all tropical diseases, will not be deemed unworthy of some consideration, but also of more enlarged trial, not only in parallel cases, but probably in many others, which cannot fail to suggest themselves in the hour of difficulty to the reflecting mind. In the appalling suspension of the *vis vitæ* in cholera, for example, combined with the judicious administration of internal stimuli, it is sure-

ly deserving of a trial, where so many measures have failed. We are told that the ancients mixed incense, myrrh, musk, and other odoriferous and stimulating drugs, with their mercurial fumigatories. Might not these be advantageously combined with the mercurial fumigatory, in cholera? Indeed, there are, perhaps, none of the Indian diseases, in which instances do not at times occur, that far more desperate measures would not, even in humanity, be resorted to, were any such available. But fumigation is so easy, and so little fatiguing in its application, that, if it were but successful wherein I have presumed to suggest, it would, indeed, be an unspeakable blessing, and by no means entitle to so forbidding an epithet.

The objections which have shaken confidence in, and restricted the employment of mercurial fumigation as a specific in lues, I would totally discard, in bringing it to notice in the treatment of diseases of climate: if the permanency of its effects are in the former questionable, its speedy influence on the system is nevertheless confessed by all its detractors. But even that opposition is losing ground, as the following extract from the best and most modern practical work extant on the Venereal Disease exemplifies:—“*Mais les fumigations meritent d'être conservees en ce qu'elles sont un excellent moyen topique dans les symptomes exterieurs opiniatres : nous en avons vu des effets surprenans et presque subits, principalement dans les ulcerations du fond de la gorge, dont la marche rapide nous faisait craindre la carie des vertebres cervicales correspondantes. Nous croyons, en consequence, que les fumigations prudemment administrees seront toujours d'un grand secours dans ces sortes de chancres veneriens, ainsi que dans ceux qui affectant le palais, le nez, la muqueuse des fosses nasales, ou des sinus frontaux, peuvent menacer d'une prompte destruction les os voisins.*”

Having seen some good from a practice, which has met with great neglect from the regular practitioners of this country, I have deemed it a duty to solicit your bringing the same to the notice of the Medical Board. It has also occurred to me to offer some suggestions, deduced from a few practical data, and the almost universal powers of mercury on disease, and, thus generalising, thereby incurring stricture for favouring empiricism, rather than not present so imperfect a contribution. But it is in the hope that the experience of others, or my own, will hereafter substantiate them on a basis as rational and scientific, at least, as that on which the fame of many of our best remedies rests.

BRANDE'S Manual of Pharmacy.

(From the London Medical Repository.)

THERE is, perhaps, no department of medical science which has attracted more attention in modern times than Pharmacology; and certainly none which has made a slower progress than it has done, in some of its details, and advanced more rapidly in others. This general state of the science, in relation to what it was at earlier ages, is so evidently the result of the recent progress of chemical knowledge, that reference need scarcely be here made to the fact. Indeed, pharmacology is so closely allied to chemistry, that the advancement of the former branch of study necessarily holds a close relation to, and, in some of its departments, depends upon, the progress of the latter. As discoveries, therefore, in chemistry, daily added to the knowledge of the physical properties of substances, so that knowledge was taken advantage of, and applied to the highest purposes of science. But as those discoveries were almost entirely limited to mineral bodies, so did those bodies rise in medical importance, until the neglected class of Galenicals was almost altogether thrown into the shade. Hence it resulted, that those substances, which had acquired a classical and imprescriptible right to medical use, were either lost sight of among the crowd of those on which chemistry had thrown no additional light, or were employed in a state of combination by no means according with past experience, and with a timidity commensurate with our ignorance.

It is chiefly, therefore, in the mineral kingdom that the triumphs of modern pharmacy are undisputed. Here chemistry has furnished medicine with some of the most important facts and improvements which have enriched the latter in recent times—has given precision to what was previously known respecting the properties of substances belonging to this class—and, in many instances, ascertained the nature of their composition, and indirectly thrown a considerable degree of light upon their modes of action on living animals. The great utility of this knowledge has been most apparent in its application to the practical purposes of our art,—the individual substances composing this class have been prescribed with greater decision and utility, because our knowledge of their constitution and properties has been more precise, and hence their services have been more highly valued. It is chiefly owing to these circumstances that modern pharmacologists have acquired an ascendancy over those who had preceded

them long before ; and it is chiefly as respects mineral preparations that their writings are most valuable. Among the works in this department of science to which the profession has been most indebted, in more modern times we may particularise, and confidently recommend for perusal, those of Gaubius, Gorter, Hartmann, Lieutaud, Vogel, Bergius, A. Murray, Alston, Cullen, Alibert, Fievee, and Niemann. The works of Dr. Murray, Dr. Duncan, Dr. Thompson, Dr. Paris, and of Mr. Gray, are already in the hands of every practitioner.

The student of pharmacology, who wishes to make himself master of the subject, ought not, however, to content himself with having only consulted modern works in this department of medical science, and still less should he limit his inquiries to the recent works of his own country. The medical literature and science of Germany, France, and Italy, present us with several treatises on the *materia medica*, which will be perused by the majority of readers with much advantage ; and even the works on the subject which have appeared in less modern times will furnish him with much interesting matter, more particularly as respects the very deserving class of Galenicals. The Greek, Roman, and Arabian writers on the *materia medica* contain, also, much more useful information than those who are unacquainted with their works may be inclined to suppose. What, we may be permitted to ask, do we know more of the virtues of many vegetable substances than may be found in Galen, or, at least, in the writings of Mesue ? Considering, therefore, that many useful, as well as otherwise interesting particulars, are to be obtained from the classical and other ancient authors, who have either treated of the substances belonging to the *materia medica* particularly, or mentioned them incidentally, we shall endeavour to facilitate the researches of those who may wish to refer to these sources. This plan cannot, however, be followed out with respect to many of the older writers ; the task would be endless, and the advantages by no means in proportion to the labour required to its satisfactory performance. Those references which we shall add, in the form of notes, may serve to renew many of our pleasantest associations, and to awaken recollections the best calculated to relieve the mind of the weightier cares consequent on the duties of our profession. Even when employing those substances, whose effects it is our daily occupation to ascertain, the mind may be agreeably amused by the ideas which an acquaintance with those sources themselves can alone suggest ; and we shall thus, if we

take the trouble to inquire, have it in our power to become acquainted how far our knowledge of the virtues of the vegetable substances, to which those references are chiefly added, has been progressive, or whether or not our advancement in this department of pharmacology has been at all proportionate to the march of general science. For our own parts, we believe that here we have, in several points of view, made but little progress. Of the properties of many plants, there is little to be learnt in some modern works which is not to be found in Galen, Oribasius, Mesue, Clement Clementius, &c. ; and as respects their mode of exhibition and application to the particular circumstances of disease, but little has been added since the appearance, at less remote epochs, of the works of Schroeder, Hermann, Walther, Albert, and of some other writers on the *materia medica*. But very few readers, even at the present day, can peruse the laborious collection of treatises published by Manget, or those of Hoffmann on several classes of remedies, without obtaining much information ; and the same may be said of the works of Sylvius, Horstius, Boerhaave, and others. The chief fault of these works is their polypharmacy ; but, in numerous instances, the properties of the plants brought together in one formula are by no means incongruous ; and in many cases are the advantages of such an assemblage insisted on with truth and propriety, and supported by appeals to observation and enlarged experience. Thus, for example, the reader may find, in Hoffmann's remarks respecting tonics, that their judicious combination and appropriate exhibition will render them the most valuable aperients, under many circumstances which are ably pointed out by him---a fact which, although known also to many writers of experience, has been adduced as a novel observation made by some authors of our own times. The antiseptic and anthelmintic properties of several vegetable bitters have been insisted upon by the older pharmacologists as strongly as by modern ones, and the propriety of combining them with the purgatives obtained from the same kingdom has been copiously exemplified. Therefore, when we find tonic, antispasmodic, aperient, and aromatic plants combined in the same formula, where is the incongruity ? Nay more, is not an evident benefit obtained therefrom ? If the object be to relieve constipation, spasm, colicky pains, or any similar derangement, can a better plan be devised ; or can any one be thought of besides, which, while it relieves present disorder, will better prevent its return ? We are not, however, prepared to deny that the formulæ of the ancients, and of the older

medical writers, were encumbered with many useless ingredients, and that they were not always judiciously combined; but we are prepared to contend, and to prove the truth of the assertion, that the moderns, and those of our own country in particular, have erred as much by adopting excessive simplicity of prescription. We have reason to suppose that a combination of vegetable substances, possessed of analogous virtues, or nearly so, is preferable, as respects both the extent and permanency of their effects upon the system, to the adoption of a larger proportion of either one or two substances only. This is not the case with a single class of remedies alone, but it obtains generally. And not only may many individuals of a class be combined, but many of those appertaining to one class may be joined to those of another; and if the combination be made with a due regard to the influence of each, as taught us by experience, and to the circumstances of disease, the general effect will be heightened. Thus, a combination of tonics, antispasmodics, and aperients, when prescribed with a due reference to the condition of disorder existing at the time of their exhibition, will be more tonic, more antispasmodic, and more aperient, than if the same, or even a larger dose, of one only of these remedies had been exhibited with a view to produce a single effect. But this subject has been so well illustrated by many able writers about the end of the seventeenth and commencement of the eighteenth century, as well as by some of the present day, that we shall leave it with stating our belief that, but in few instances shall we obtain the full effects of medicines by giving them in the concentrated and isolated state in which they are extracted from vegetable bodies, unless we afterwards combine them with other substances capable of promoting their action and of determining their effects. We believe that what we gain from the convenience of the form, or diminution of bulk, or gratefulness to the palate, is often lost in the uncertainty of the effect and its evanescent character.

We cannot conclude these cursory observations as to the progress of our knowledge respecting Galenicals, without stating, that we are chiefly indebted to Alston, Home, A. Murray, K. Sprengel, A. T. Thompson, W. Ainslie, and M. Rousques, for whatever progress has been recently made in this department of the *materia medica*.

When we first entertained the idea of bringing the substances composing the *materia medica* fully before our readers, we intended to make our observations on the classical history,

the physiological action, and the employment in disease, of each substance, fuller and more precise than was to be found in any other work. This attempt, on our parts, might have been looked upon as sufficiently presumptuous; but if it had been at all compatible with our other engagements, and the limits of our Journal, we should not have despaired of its performance. Having made many of the most important substances of the *materia medica* the subjects of clinical experiment, and having it in our power, from abundant sources before us, to know the opinions of the best writers in this department of medical science, as to the properties and mode of action of particular medicines, and their effects upon various forms of disease, the object which we had thus proposed to ourselves seemed not altogether beyond our reach. But as this more enlarged undertaking would occupy too many of our pages, and become perhaps, tedious to many of our readers, we have contracted our views, and shall therefore give only references where we might have quoted passages. We shall refrain also from stating opinions which may be found in the pharmacological works in general circulation; and in order that our article may not lose the character of a review, we shall make Mr. Brande's recent work on *Pharmacy* the basis of our remarks.

Having thus gone through, at our leisure, the *materia medica* and its preparations, we shall then inquire into its arrangement, and develope the plan of classification which first appeared in the pages of this Journal, and which has been subsequently followed, with but slight modification, in the two last editions of the *Pharmacology* of Dr. Paris, and in the classification of poisons, in the *Treatise on Medical Jurisprudence*, of the same author.

ABIETIS RESINA. *Pinus Abies*.—Mr. Brande's remarks on the use of this resin present us with nothing which requires comment. We advert to it chiefly in order to notice the medical use of the tops of young shoots or branches of the *pinus abies*. An infusion of these is occasionally employed, in Germany and the northern countries of Europe, as a tonic, balsamic and diuretic medicine; and from what we have observed of its use, we think that it is frequently resorted to with advantage. The following is the formula which is generally adopted :—

R Turion. Pini. Abietis 3ij.

Infunde Aquæ servidæ 3 viij.

To this infusion may be added some of the alkaline aperient, or deobstruent salts, the spirit, æther, nit., or spirit. juniperi

Select Reviews.

The use of this medicine, continued for a seasonable time, has been found beneficial in several chronic obstructions, which had resisted various plans of cure.

ABSINTHIUM. *Artemisia Absinthium*.—The vermifuge properties of wormwood are much undervalued by Mr. Brande. There is not any of the vegetable tonics which produces a more sensible action on the nervous system than this; and the continued use of it seems to occasion considerable narcotic effects, and congestion of blood in the head. This effect appears to result from the narcotic character of the essential oil, on which its influence on the nervous system depends. Its tonic and anthelmintic properties seem to reside in its bitter extractive matter. This plant was deservedly much used, in torpid states of the abdominal viscera, by physicians both in ancient and in modern times, down to the middle of last century, when it seems to have gone, in some degree, out of vogue. In Germany and France, its essential oil is often prescribed in spasmodic and other nervous diseases. The following recipe is often adopted as anti-emetic and anti-spasmodic:—

R Olei Æther. Absinthii 3ss.
Spiritus Æther. Sulphurici, et
———Vin. Rect. aa 3ij. M.

Sumat æger gut. xx.—xxx. omni hora, aut omni bi-aut trihorio.

ACACIA. *Mimosa Nilotica*.—The gum of this plant is, to the disciple of Broussais, one of the best articles in the *materia medica*. As a grateful demulcent merely, the following recipe, given by Mr. Brande, may be adopted, or varied according to circumstances:—

R Mucil. Acaciae 3j.
Olei Amygd.
Syrup. Tolutani, aa f. 3ss.
Aquæ Cinnam. f. 3ij.
———distillat. f. 3iv. M.

Fiat mistur. cujus sumatus parum subinde.'

ACETUM.—The pharmaceutical history of vinegar is given very fully and satisfactorily by Mr. Brande. On this topic we shall not detain our readers, but proceed to observe briefly, that vinegar, exhibited in the form of injection, with an equal quantity of water, is frequently serviceable in removing obstinate constipation. Birnstiel, in his work on *Dysentery*, says that he has found two ounces of vinegar and the same quantity of water, given as an enema, most serviceable in relieving the tenesmus usually accompanying the disease. Leak re-

commends its use in uterine hæmorrhage. The vapour of vinegar is sometimes serviceable in chronic bronchitis. We need not refer to its use in other disorders, nor to its virtues as a destroyer of contagion. In the latter capacity, it cannot be considered as possessed of the least virtue ; the beneficial effects resulting from the use of it and its different preparations proceed entirely from the stimulus which its vapour imparts to the nervous system ; and hence it renders the system, like other penetrating odours, less susceptible of a noxious influence. Mr. Brande very justly remarks, that 'a clyster of diluted vinegar is sometimes used in typhus fever, and is a useful evacuant of the lower bowels.'

' R Aceti f. 3ij.

Infusi Anthemidis f. 3v. M.

Pro enemate.'

ACONITI FOLIA. *Aconitum Neomontanum*.—Although we cannot agree with Mr. Brande that this plant should be expunged from the *materia medica*, yet we think that it will not be found beneficial in many instances, and that we have no satisfactory proof of its efficacy in scrofula and cancer. Meckel prefers the infusion of the leaves

ALLIUM. *Allium Sativum*.—Garlic, boiled in milk, is a common domestic anthelmintic. Its use in asthma, catarrh, autumnal intermittents, and as an external irritant and revulsant, is sufficiently well known. Cotton, moistened with the juice of garlic, and put into the ear, has been frequently found serviceable in cases of rheumatic deafness.

ALOES EXTRACTUM.—The physical, pharmaceutical, and medical history of aloes is well known. It has been accused, since the days of Fallopius, of occasioning hæmorrhoids. 'Experientia docet,' (he states, in his *Treatise de Medicam. Purg.*) 'quod frequens usus aloes aperit venas hæmorrhoidarum, quod ego millies vidi, et ex centum eorum qui utuntur frequenter aloe ad excernendas fæces, videbitis nonagnitapati fluxum hæmorrhoidarum.' We have, however, heard this opinion controverted by men of great experience. We believe that much of the irritating effects of aloes on the large intestines is owing to the manner in which it is prescribed. If it be intimately combined with oleaginous, saponaceous, or mucilaginous substances, so that its particles are minutely divided, and rendered more soluble in the upper portions of the intestinal canal, we have every reason to suppose that its effects upon the rectum will not be so manifest as when it is exhibited in a more insoluble form.

' The following pills'—Mr. Brande very justly observes—

are useful or obviating costiveness in dyspeptic habits, but they should not be kept too long in a dry place, as they are apt to become hard, and so insoluble as to pass through the bowels,—an inconvenience which may to a great extent be remedied by the addition to the mass of about a fourth part of sugar or of soap.

• R Pulveris Aloes,
— Mastiche,
— Rhæi, aa 3ss.

Aquæ, q. s. ut fiant mass in pilulas xx. dividenda, quarum sumantur duæ vel tres ante prandium.

‘ The time for taking these pills is immediately before dinner ; they then blend with the food, prevent flatulency, and are usually found to be operative the following morning after breakfast.’

ALTHAEA OFFICINALIS.—Mr. Brande sets no high value on the medical properties of this plant. It has however, enjoyed a long and a great reputation, and is still very generally prescribed on the Continent. The decoction of the althæa officinalis is undoubtedly an excellent demulcent in affections of the bowels, and in several disorders of the chest ; and is, notwithstanding Mr. Brande’s opinion to the contrary, superior to the decoction of barley, or to gum-water.

AMMONIACUM.—There are few articles in the *materia medica* which are more injudiciously employed in some disorders of the lungs than ammoniacum. Wherever there is any degree of inflammatory action existing in this organ, ammoniacum ought never to be prescribed. In the chronic stage of bronchitis, however, and of catarrh, it is a most useful expectorant. In the dyspnœa, also, of aged persons, when this arises from some degree of spasm of the bronchial ramifications, with accumulations of viscid mucus in them, the use of ammoniacum will prove serviceable. Peripneumonia notha, of cold phlegmatic habits, and in very aged persons, is frequently benefited by its use. In these cases, it may be advantageous combined either with myrrh, assafœtida, oxide of zinc, sulphate of zinc, small doses of squills, conium, senega, camphor, althæa officinalis, the kermes mineral, or small doses of antim. tarizat. ;—with one or more of them according to circumstances.

This remedy may be made a useful ingredient in prescriptions for hysteria, chlorosis, emansio mensium, and amenorrhœa, when the system is weak and the pulse languid—for chronic obstructions of the abdominal viscera and glands.

and for some cases of passive dropsy, especially when combined with small doses of mild mercurials, or other appropriate remedies—for cold flatulent colics, habitual costiveness, and when there seems to be a loaded or saburral state of the mucous surfaces of the digestive tube, and when the functions of the intestines are impeded by an accumulation of viscid mucus in them. Its combination, in these cases, must be left to the judgment of the practitioner. We have found its internal and external exhibition of service in mesenteric diseases, and in the dislodging, from the bowels of children, of the viscid mucus containing ascarides. The application of a large ammoniacum plaster over the abdomen, is of great service in many of the chronic disorders of the viscera contained in this cavity. It may be combined, with great benefit to these diseases, with a number of other substances, as castor, assafœtida, valerian, vegetable tonics and bitters, ammonia, sulphuretum antimonii, taraxacum, &c.

Ammoniacum seems to exert its activity primarily upon the nervous system, and chiefly upon the distributions of the great sympathetic nerves, and, through their influence, upon the circulation. Hence its action becomes diffused throughout the frame; diminishing the spasm of debility, from its influence on the nervous system, and increasing the tonic action of the heart and capillary vessels, from the connexion existing between these and the sympathetic class of nerves. We have no satisfactory proof of its being absorbed into the circulation. If, however, absorption of it to any extent actually take place, the circumstance may serve farther to explain its action upon the animal economy. It will be seen from this, that ammoniacum ought never to be exhibited whenever there exists any febrile commotion of the system.

The following formula will be found beneficial in chronic disease of the liver or spleen, or in dropsy arising from a torpid state of the absorbents and venous capillaries :—

R Gummi Ammoniaci,
Extracti Taraxaci,
Saponis Venet. aa 3j.
Pulveris Scillæ gr. vj.
Pilulæ Hydrargyri gr. xv.
Olei Junip. q. s. M.

Fiant Pilulæ xvij.

Instead of the blue pill, or, indeed, in addition to it, a scruple of the sulphuretum antimonii may be added. If the ammoniacum be exhibited in the form of mixture, it may, when there is a very great and obvious want of action, be given

with advantage in conjunction with the infusion of the horseradish, vinegar of squills, and with either the nitrous ether or compound spirit of juniper berries

AMYGDALA AMARA ET DULCIS. *Amygdalus Communis.*—The existence of hydrocyanic acid in the essential oil of the bitter almond, renders this latter substance a suitable substitute for the former, in affections of the lungs, in coughs of a spasmodic character, especially hooping-cough, if the patient be not very young ;* in asthmatic complaints, and some cases of local irritation,—as in irritable ulcers, diminishing their discharge, or stopping it altogether. It may be combined with camphor, or other antispasmodics, in these diseases ; and with antispasmodics, and tonics, in disorders of the stomach—in dyspepsia, gastralgia, cardialgia, and pyrosis.

The oil of bitter almonds, or the hydrocyanic acid, may be added to the mixture prescribed at p. 273, in cases of cough and catarrhal irritation of the larynx. If the oil be preferred, about eight or ten minims will be found sufficient.

From the experiments of Mr. Brodie and M. Orfila, the oil of bitter almonds and the hydrocyanic acid seem to act, when given in small quantities, as stimulants to the involuntary and voluntary classes of nerves,—if they be exhibited in large doses, they overpower their vital action, impair their sensibility, and operate as powerful sedatives of the functions of the large nervous masses. The sedative effects produced upon the brain and nervous system are soon followed by a remarkable diminution of all the organic and animal functions ; the changes produced upon the blood by respiration become impeded, or altogether arrested ; and venous blood being consequently circulated for a time, thus serves to heighten the primary effect. In order to counteract these effects, ammonia, and other stimulants, as coffee, turpentine, &c. should be exhibited, and effusion of cold water on the head may be resorted to.

‘The expressed oil of sweet almonds,’ Mr. Brande observes, ‘forms with alkalies a soapy mixture, which may be substituted for emulsion, or which sometimes, with an increased quantity of alkali, is used in renal and urinary irritation, especially that arising from uric sand.

• R Olei Amygdalarum f. 3 ss.

Aqua Rosæ f. 3 ij.

Liquoris Potassæ f. 3 j.

* We must caution our practitioners against exhibiting this powerful medicine to young children,

Misceantur agitatione, et adde
Syrupi simplicis f. 3 ss.
Aquaæ distillatæ f. 3 v. M.

Fiat mistura, de qua sumantur f. 3 ij. pro dosi.

‘In cases of catarrh, with hoarseness, f. 3 iss. of liquor ammoniae is sometimes substituted in the above mixture for the solution of potassa.’

ANETHI SEMINA. The seed of the *Anethum Graveolens*.—The *aqua anethi* forms, perhaps, the best carminative medicine for the flatulency and singultus of children; and is, moreover, an excellent vehicle for other carminative and aperient remedies. The seeds of this plant exert a considerable stimulating influence on the abdominal functions; and, therefore, prove a useful adjunct to other medicines which are indicated in torpid conditions of these viscera. Schroeder thus enumerates the virtues of the *anethum graveolens* :—

‘Lenit dolores, auget lac, conciliat somnum, venereo appetitus minuit, singultui vomituique medetur: et haec omnia præstat usu interno et externo. Imprimis tamen extrinsecus clysteribus anodynus immiscetur, capitisque cataplasmatis anodynus et somniferis (summitates cum oleo olivarum coctæ).’

II.

(From the Edinburgh Medical and Surgical Journal.)

A Short Treatise on the Section of the Prostate Gland in Lithotomy; with an Explanation of a Safe and Easy Method of conducting the Operation on the Principles of Cheselden. Illustrated by Engravings. By C. ASTON KEY, Surgeon to Guy's Hospital, and to the Magdalen.

THE lateral operation of lithotomy, as it was improved by Cheselden, furnishes one of the happiest examples of the triumph of science and art over ignorance and empiricism, that the history of surgery can boast. It is impossible to trace the literary history of this operation from the rude and ignorant attempts of Frere Jacques to the perfection which it attained in the hands of Cheselden and his successors, without being convinced of the advantage which correct anatomical knowledge confers upon operative surgery. In cutting, according to this method, into the bladder, for the purpose of extracting a

stone, it is requisite not only to know well the several parts which are to be divided, but to understand perfectly the direction which the incisions are to take, at once for the sake of accomplishing the purpose of the operation, and to prevent injury to parts which it is either unnecessary or unsafe to divide. On this account, it is scarcely possible to be too familiar with that species of relative anatomy which enables the Surgeon, in a single moment, to represent mentally the situation and direction of every part of the urethra, from the triangular ligament to the triangle of the bladder ; and whoever has dissected and examined these parts most frequently and most attentively, will invariably perform the lateral operation of lithotomy with greatest confidence, and, we may assuredly add, with greatest success.

Of all the steps of this operation, the most important is unquestionably the immediate incision into the bladder,—in other words, the division of its neck and prostate gland ; and of this incision, the most important point to be clearly understood, is the direction which the incision is to follow. Impressed with the truth of this observation, the author before us has undertaken, in the present treatise, to place this part of the operation before the profession in such a light as shall render its principle manifest, and its performance uniform and regular in practice. But before we proceed to bring the merits of the author before the eyes of our readers, we have to advert to a singular species of misstatement, which appears on the very threshold of his disquisition, and which we have equal difficulty in explaining, and pain in observing.

Mr. Key, in his preface, states, in pretty plain language, that he regards the mode of division of the prostate gland as the true principle of this operation ; and afterwards, in a short historical review in the first pages of his Treatise, he informs us, that, “in his first operation, Cheselden adhered to the plan of Frere Jacques and Raw ; but, from the ill success attending it, he was soon induced to lay it aside. He then practised the operation,” continues Mr. Key, “which, from the lateral division of the prostate gland, has since been denominated the Lateral Operation.” This information is unquestionably entitled to the merit of novelty ; but we regret to say, that it is not consistent with the historical facts of the case. We have the honour to inform Mr. Key, that Cheselden was not the first to perform the lateral operation, as he represents ; that this operation was certainly performed by Frere Jacques, and at least probably by Raw ; and that, whether it be his pleasure to term the operation *lateral*, from the circumstance of the lateral division of the prostate gland, or not, it is certain

that Cheselden had the merit simply of improving it by his profound and correct anatomical knowledge of the parts concerned in the operation. That these are not mere assertions, but correct historical statements, will readily appear from reference to the usual authorities, with several of which at least, our author proves his acquaintance.

The history of an improvement in science is rarely investigated, until it acquires interest by its novelty or actual utility; and that of the lateral operation of lithotomy has not been exempt from this general fate. It was not till the operations of Frere Jacques began to excite interest, and the improvements of Cheselden attracted attention, that surgeons thought of tracing the origin and history of this operation; and according to the account of Deschamps, all authors that ever had written, Greeks, Romans, Arabians, physicians, surgeons, and quacks, were successively ransacked, in order to ascertain if there was any legitimate pretext for depriving the monk of the merit of originality. The results of this laborious consultation are given by Deschamps, and they serve to show the mortal antipathy which all men, and especially all surgeons, have in allowing to any single individual the merits of an important change in science or art. We know not whether Raw was serious, or wished merely to give a civil answer, which means nothing, and might throw his querists off their scent, when he replied to all their questions, *Celsumlege*; but the sentence, *transversa, plaga facienda est qua cervix aperiatur*, was found in the description of lithotomy by the physician of the Augustan age; and this was enough to convince those who were willing to be convinced. This sentence, at all events, Deschamps thought sufficient to warrant the conclusion that we find mentioned in the description of Celsus, not the method of Cheselden, but only the place and the direction of the incision. As, however, the Celsian method was to cut on the *stone*, or what is technically named *cutting on the gripe*; and as the method of Frere Jaques was by cutting on the staff, this was thought a sufficient peculiarity to leave the Friar in possession of his discovery.

Another claimant for the merit of the lateral operation, was discovered in Peter Franco, who, in 1561, published the following account of his mode of cutting into the bladder. "The incision is to be made between the fundament and testicles, two or three fingers breadth along the commissures or perinaeum; but it is requisite to have a silver cannula like a sound, but open without to receive and convey the knife (a grooved staff is meant,) which is to be introduced through the

urethra into the bladder ; an assistant is to hold this firm, supporting it somewhat against the perinaeum, but always turned a little towards the right, in order to make the incision exactly on it, and to enable the knife to enter readily ; then taking the knife at the situation of the cannula, it is requisite to cut the neck of the bladder upon its cavity, “*il faut couper le col de la vessie sur la cavite d'icelle,*” (on the groove of the staff) ; this being done, the operator will carry the knife along the groove, which will cut on both sides; after which, the gorget is to be introduced upon the groove, the cannula for this purpose being lowered before by the assistant, in order to allow the gorget to enter the bladder more easily.” Afterwards, this author assigns various reasons, in consequence of which, ‘*il faudra donc se garder de copper la vessie hors de son col, la ou il y a graisse ou muscle.*’ He used the gorget only for the purpose of introducing the forceps.

Jacques de Beaulieu, commonly called Frere Jacques, performed his operation, it is well known, first on the dead body at the Hotel-Dieu, in presence of Mery and other qualified surgeons ; and Mery having carefully dissected the parts which had been cut, found “that the operator first divided about one inch and a half of fat, then that he had introduced his scalpel between the *erector* and left *accelerator* muscles, but without wounding them ; and lastly, that he had cut the neck of the bladder laterally its entire length, and about two inches of the body of the organ.” But this is not the sole evidence on the point. Mery states expressly, that, in performing his operation, Frere Jacques, “*coupe a las verite le corps des prostates, le col entier de la vessie, par le cote, et un peu son corps.*” It is no doubt true, that subsequently, when in the height of his reputation and popularity, he cut forty-two patients at the Hotel-Dieu, and eighteen at la Charite, of whom twenty-three died shortly after operation,—it was found on dissection, that in some the bladder was opened in its fundus, in others its neck was detached from the urethra, in females the vagina was invariably penetrated in two opposite places, the rectum was frequently opened in both sexes, and in all there was much laceration ;—yet, it cannot be denied, that the simple circumstance of finding the prostate gland divided after his mode of operating, and of Mery publicly reporting this, cannot fail to show, that the merit of Cheselden did not consist in being the first to divide this gland.

The operation of Frere Jacques was not left entirely unimproved even at this period ; for Mery, in his Report, pronounces it preferable to the Marian, or that with the great appara-

tus, providing the incision was directed on a grooved staff; if the incision of the bladder was begun somewhat higher; and if the dilatator was suppressed. In other respects he approves of the oblique incision between the raphe and the ischial tuberosity, penetrating between the *erector* and *accelerator* of the left side, to divide the neck of the bladder and a little of its body. It is remarkable that these improvements, which were essentially to combine the method of Peter Franco with that of Frere Jacques, were actually adopted by the latter, and published in 1702. "The staff," says Deschamps, "being introduced into the bladder, he holds it in the left hand; he cuts the raphe obliquely by the tuberosity of the ischium; he enters by the erector and accelerator muscles; he cuts the neck of the bladder in its whole extent, and introduces the forceps by the incision."

Of the method employed by Raw, his illiberal jealousy, it is well known, prevented him from leaving any traces; and all that we learn of the incisions which he practised, and of the direction which they followed, is derived from Albinus, who witnessed his operations. According to the account of this distinguished anatomist, Raw having sought a spot about one or two inches from the anus, towards the ischial tuberosity, divided first the skin and fat, by a long incision directed from above downwards; introduced the finger or thumb of the right hand into the wound, towards that part of the bladder which he proposed to cut; withdrawing it, introduced the point of a bistoury, and directing its point circumspectly towards the sound, which he had previously felt,—cutting gently what he encountered; and, when he had ascertained that the point of the bistoury rested on the staff, and was retained by the walls of the groove, carrying it cautiously, but steadily, upwards and downwards, he cut the bladder with a considerable wound.

It is singular that subsequent inquirers have very much perplexed themselves about what appears to us abundantly simple in this narrative, namely, whether Raw divided the neck of the bladder, or cut the organ above its neck. "Ouvrit-il," says Deschamps, "la vessie *au dessus de son col*? N'ouroit-il simplement que le col, sans toucher à la partie membraneuse; interessoit-il une petite portion de la partie membraneuse et le col de la vessie?" These questions do not appear to us to demand so much inquiry, doubt, and ingenious conjecture and supposition, as they have produced. Deschamps indeed gravely remarks, that Raw, who alone could answer, carefully concealed all means of obtaining demonstrative proof. He

took care to make the carcasses of the fatal cases disappear ; or those, says he, who undertook the examination, employed much address in concealing from spectators the traces of the incisions. It appears that much of this doubt was occasioned by Albinus giving the profession to understand, that Raw came to the body of the bladder without touching its neck ; but this Albinus seems to have done inadvertently, and by implication only ; for, as we shall immediately see, Albinus guarded himself against saying what parts were *not* cut, while he admitted that Morand was right in doubting that the body of the organ was divided. In consequence of the description of Albinus, Morand repeatedly performed the operation, in the manner of Raw, on the dead body ; and the result led both him and Albinus to the conclusion, that Raw always cut more or less of the neck of the bladder. This conclusion, indeed, might have been formed from the description of the operation of Raw, and the knowledge of the parts ; for, if we are to credit that description at all, it is manifest, that the knife, which was made to move along the groove of a sound already in the bladder, cutting, as Albinus says, whatever was in the way, must have divided the membranous part of the urethra and the neck of the bladder, ere it could reach the body of the organ.

Baron Boyer, in the ninth volume of his *Treatise on Surgical Diseases*, recently published, is entirely of this opinion,—that the pretended method of Raw, which has made so much noise, and given birth to so many researches, differs not essentially from the method of Frere Jacques, as he practised it before his second journey into Holland. In short, it may be said to be an anatomical impossibility to cut the bladder after the manner of Raw, without dividing the membranous part of the urethra and neck of the bladder, or that part which is surrounded by the prostate gland. This, we conceive, furnishes the true answer to the question of Deschamps,—“ did he open the bladder above its neck ? ” He could not have introduced his instruments into the body of the organ without the previous division of the neck. The question of opening the neck of the bladder without touching the membranous part, forms too nice a distinction from the practical facts of the case. To any one who knows the relation of the membranous to the prostatic portion of the urethra, it will appear impossible almost to push down a knife on an instrument already in the urethra, for the purpose of entering the bladder, without cutting some part of this membranous portion ; and we contend, that where the

bladder is to be opened from the perinæum, this must be the course of the incisions.

It is therefore remarkable, that Cheselden could be led to believe that Raw cut "directly into the bladder, without wounding either the urethra or the prostates ;" notwithstanding that "competent judges, who were witnesses to his operations, bore the same testimony ;" and it is still more remarkable, how he could have attempted, with the grooved staff in the bladder, and following the same kind of incisions, to perform this operation without dividing those parts. Such operation, one would have thought, must have been anatomically impossible ; and it is indeed difficult to see by what means it was effected.

Wherein, then, it may be asked, consists the merit of Cheselden ? Simply in the application of anatomical knowledge to the original operation of Frere Jacques,—in reducing to fixed anatomical principles, what was at first a bold and empirical, but fortunate chirurgical adventure. The lateral operation existed, to all intents and purposes, in the hands of Jacques,—liable, it is true, to sundry abuses ; and it only required the knowledge of a skilful and dexterous dissector to give it all the success which it could have. This it received from Cheselden, who, by investigating and explaining its principles, divested it of its evils and uncertainties, and presented it to the surgical world in a state of comparative perfection. It is in this sense only that we can understand the language of this illustrious and candid surgeon, when he says, "I contrived the manner of cutting which is now called the lateral way."

We should not have entered into this disquisition, had we not been convinced that the services of Cheselden are sufficiently great, without making him the absolute inventor of this operation, and that his merits are too substantial to require any exaggeration. The language of our author shows that some misconception prevails in the London schools on this subject ; and it is due not less to the empirical Frere Jacques, than to the candid and skilful Cheselden, to place the matter in its true light. If, after our plain unvarnished statement, any doubt remains as to the true origin of the lateral operation, we request our readers to listen to the following words of the veracious Deschamps, who spared neither pains nor research to attain the truth, and who, while he speaks in the highest terms of the knowledge, candour, and public spirit of Cheselden, cannot refuse their true merit to Franco and Beaulieu, or even to the liberal Mery. "This comparison of the methods of Franco, of Frere Jacques, of Mery and of Cheselden,

proves that they are not only the same, but further, that they are described in the same terms ; and that the operation of Franco differs in the mere expression, in so far as he does not say that he cuts towards the ischial tuberosity, and between the *erector* and *accelerator* muscles ; a dissection, however, which he elsewhere indicates clearly enough. It further results from these details, that if it be possible to entertain doubts on the lateralized operation of Franco, it is impossible to do so regarding that of Frere Jacques, published in 1702, twenty-four years before that of Cheselden. Frere Jacques is therefore *incontestibly the first after Franco, who described unequivocally the lateral operation, and the first who performed it;* and to him belongs the honour of carrying into effect what Mery had only conceived.

To proceed with the treatise of Mr. Key,—the author shortly reviews the several modes in which Morand in France, and Douglas, Cheselden himself, John Bell, and Sharp describe the steps of the lateral operation ; but pays no attention to the improvements, real or imaginary, which this operation underwent in the hands of foreign lithotomists. It was certainly not necessary to write a history of the operation since the days of Cheselden ; but as Mr. Key makes it a point of duty, to quote some of the English authorities, we beg to suggest, whether it might not have been decent at least, to say something of the alleged advantages of the method of Moreau, who asserted he did not divide the transverse perineal artery ; of the method of Lecat and the merits of his urethrotome, and his beaked cystitome gorget ; of the absurdity of the *lithotome cache* of Frere Jean de Saint-Come,—which Boyer unaccountably enough regards as the most ingenious of instruments ; and lastly, of the wounding of the internal pudic artery, which has happened more than once in the hands of good surgeons, and led to much inconvenience.

We must not however, forget, that the main object of the present treatise is to explain the section of the prostate gland, and which we entirely agree with the author, in regarding as the essential and important principle of the operation. The main point which it is practically important to determine, is in what direction should the prostate gland, and neck of the bladder be divided, and what is the most proper instrument for performing this section ? According to Mr. Key, “Cheselden’s aim evidently was to divide the prostate gland, in the *depending part of the left lobe*, with a considerable inclination towards the rectum ;” yet how does this tally with the subsequent inference ? From the quotations adduced from the

English authorities now mentioned, Mr. Key infers, that "two points are clearly made out ; first, that the edge of the knife was turned *upward* ; and secondly, that the knife was in this position carried into the neck of the bladder behind the prostate gland." This mode of speaking is assuredly very confused : for it is impossible to conceive the neck of the bladder *behind* the prostate gland as our author represents, and the relation which it bears to this gland, is rather that of anterior, or more correctly of an oblique anterior-superior position ; and if there is truth in the language of relative position, when applied to anatomy, it is a manifest contradiction in terms, to talk of the knife being carried *upward* into the neck of the bladder, *behind* the prostate gland, for the purpose of dividing this gland in the *depending part* of the left lobe." These inconsistencies require rectification and adjustment.

Our author is perfectly right in ascribing much inconvenience to the curvature of the staff in performing this operation ; and justly reprobates the use of the gorget. If the staff is of the curvature usually given, the operator ought to remember how liable an instrument is to slip off exactly at the bend, or to be broken, and cause much inconvenience if not danger.

" In the use of the gorget, a more unpleasant feeling is experienced by the operator ; namely, the danger of the beak slipping from the groove of the curved staff ; a danger, not imaginary, but with reason insisted on ever since Hawkins's first introduction of the cutting-gorget, as well by its strenuous advocates as by its enemies. The operator has to attend to two sensations, the running of the beak along the staff's groove, and the resistance afforded by the prostate gland ; while he is overcoming the latter, he becomes unconscious of the former, and at the time he impales the prostate, loses all certainty of the beak being within the groove ; this difficulty depends as much on the curve of the staff as of the nature of the cutting-gorget, and is one that every candid surgeon must acknowledge frequently to have experienced.

The first impediment a surgeon meets with, is the giving the first impetus to the gorget ; by raising his hand, he is aware of the hazard he runs of the blade slipping between the gut and the prostate ; by depressing it, he is in danger of thrusting the beak at right angles against the staff, so that the gorget cannot run along the groove ; and not unfrequently in the efforts of the surgeon to propel it onwards, the beak is nearly broken off the gorget's blade, and the staff is withdrawn with a bent back. These accidents I have witnessed ; and by those who have

seen much of gorget lithotomy, such occurrences will be recognised as by no means uncommon."

In short, it has ever appeared to us singular, that any person pretending to perform surgical operations upon anatomical principles, should persist in the use of an instrument which has nothing to recommend it, but the gross clumsiness of the mechanical manœuvring with which it must be *wrought*. It is certainly the most barbarous and cruel contrivance that the greatest enemy of surgery could have devised ; and if the following statement of the evils resulting from its use, will dissuade one lithotomist only from employing it, Mr. Key will not have written in vain.

"First. The cutting edge of the gorget is conducted so high under the narrow angle of the pubic arch, as to incur a great risk of wounding the pubic artery ; a frequent consequence of the introduction of the gorget into adults, being, as is well known to surgeons, a profuse gush of arterial blood ; and, what is more material, not unfrequently great difficulty in restraining the haemorrhage after the operation.

"Secondly. In the section of the prostate, the gorget is carried upward through the large plexus of veins which surround the upper surface of the gland, by which long continued venous haemorrhage is produced, filling the opening into the bladder with coagula, and preventing the ready exit of urine, both by the wound and penis ; thus producing the infiltrations of urine into the cellular membrane, which frequently cause so much irritation after lithotomy.

"Thirdly. The section of the prostate is made in a direction most unfavorable to the extraction of a calculus. Instead of the free incision made through the depending lobe of the gland by Cheselden, the gorget merely slices off the upper and narrowest part, leaving the body of the gland, which affords so much resistance to a stone, untouched. The slicing of the gland never affords room enough for a large calculus to pass, and, in the violent efforts to extract it, either the bladder is torn laterally, or, what is worse, the prostate is dragged towards the external wound, and its ligamento-cellular connexion with the arch and ramus of the pubes destroyed. When the operation is properly performed, that is, when the wound in the prostate is sufficient for the passage of the calculus, the connexion between the prostate and the arch of the pubes remains ; and affords an opposing barrier, when the finger is attempted to be thrust upwards by the side of the bladder."

These evils are almost peculiar to the gorget operation. The following though common to it with any bad or forcible mode

of operating, is much more liable to take place after the use of that instrument than any other.

"Fourthly. To be fully aware of the mischief attending this laceration of the prostatic connexions, a knowledge of the cause of death after lithotomy is necessary. It is a prevailing opinion, that stone patients die of peritonitis, brought on by the injury done to the bladder during the operation ; a mistake which, though not leading to any serious error in the after-treatment, is so far attended with mischief, inasmuch as it misleads the mind of the surgeon from the true source of the fatal event. I will not venture the assertion, that inflammation of the peritoneum is never a sequela of lithotomy, but that it is an extremely rare occurrence, and still more rarely the cause of death, examinations *post mortem* have fully convinced me. During the ten years I have been at our hospitals, I have never yet seen an unsuccessful case examined after the operation, in which inflammation of the peritoneum could be regarded as the cause of death ; and as invariably I have found that one circumstance was uniformly present, namely, suppurative inflammation of the reticular texture surrounding the bladder. Those who are unaccustomed to morbid examinations may be inclined to be sceptical on this point, and may think that an injury done to the prostate and neck of the bladder, by a cutting instrument, would be productive of more serious evil to the constitution, than a laceration of reticular texture. Some also may probably look on this explanation as a refinement of modern surgery, and one not borne out by facts ; the fact, however, is indisputable ; and analogy will bear us out in attributing the highest constitutional symptoms to active suppuration of cellular tissue. In injuries of the scalp, if the wound has penetrated the tendon of the occipitofrontalis, we expect extensive suppuration, not from the injury to the tendon, *quoad* tendon, but from the laceration or other injury done to the cellular membrane between the tendon and pericranium. In like manner wounds of fasciae, whether of the hand, foot, or other parts of the extremities, are dangerous in their consequences, not from the injury done to the tendinous fibres, but from the exquisitely acute inflammatory action set up in the subjacent cellular tissue. This reticular membrane may be regarded as an infinite number of serous cavities, communicating with each other, and presenting an incalculable extent of surface. Inflammation spreading rapidly through these cells will quickly affect a surface much greater than that of the peritoneum, and I have witnessed symptoms as acute, pain as severe, and the peculiar depression attending

peritonitis as marked in the reticular inflammation, as in the most acute and fatal case of inflammation of the abdominal cavity. The instances I have met with of the texture surrounding the bladder being affected with suppurative inflammation, and terminating fatally, whether arising from lithotomy or operations for fistulæ in perinæo, are sufficiently numerous to allow me thus to generalize on the subject, and afford a very useful lesson to those who endeavour to profit by examinations after death. In the inspection of those who die after lithotomy, it is not sufficient to look into the peritoneal cavity, to open the bladder, or to examine the state of the wound ; the peritoneum lining the lower part of the abdominal muscles should be stripped off, and the source of evil will then be laid open. The finger will enter a quantity of brick-dust coloured pus in the cellular substance around the bladder, and if considerable force has been used in the extraction of the stone, will readily find its way towards the wound in the peritoneum ; the barrier between the adipose structure of the peritoneum and the reticular texture of the pelvis being broken down, the suppurative inflammation spreads rapidly along the latter, and may be traced in some cases, between the peritoneum and abdominal muscles, as high as the umbilicus ; in one case I have seen it extend to the diaphragm."

The cause of this destructive inflammation is found in the following passage.

"Lastly. Every surgeon who operates with the gorget is under the apprehension of its slipping between the bladder and rectum : if the beak slips from the groove before it has entered the bladder, it is supposed to have passed between the gut and the prostate. From the bearing of the gorget during its introduction, I always entertained some doubt as to this being the direction which the gorget takes under such circumstances. In the only instance in which I have had an opportunity of ascertaining the real course of the gorget in this accident, I found that the instrument, which was supposed to have passed between the bladder and rectum, had taken a very different course ; it had slipped from the groove of the staff, had been propelled under the arch of the pubes, and had entered the reticular texture above, and to the left side of the bladder.—I believe this to be the usual course of the gorget, when it slips out of the staff : to force it between the bladder and rectum, the beak must be thrust downwards, a direction which is never given to the instrument in passing it into the bladder."

To obviate these evils, Mr. Key operates with a straight director, and a common straight scalpel, which he finds to be

"entirely free from the objections of the curved staff and gorget, and to combine advantages which a curved instrument cannot possess."

"I was first led to try an instrument of this form on the dead subject, by the following accidental occurrence. Being called upon to examine a child who had died with stone in its bladder, I was desirous of performing the operation, before making any examination of the body; and having neither staff, gorget, nor stone-knife with me, I was obliged to operate with a common director, a scalpel, and dressing forceps; and I was forcibly struck with the facility with which the director conducted the knife into the bladder.

"The introduction of this instrument is not attended with any difficulty; it enters the bladder of the adult, or infant, with as much facility as one of the accustomed form. When held in the position for the first incision of the operation, it might strike a surgeon, in the habit of using a common staff, that the point of the director was not in the bladder, an objection that, if correct, would justly condemn it as a dangerous instrument. To satisfy my own doubt on the subject when first I used it, I cut open the bladder, while an assistant held the director in the position delineated in plate 2; and in every subject on which I tried it, I found the extremity projecting some way into the base of the bladder. In plate 2 will be found a correct view of the bladder, with the instrument passed into it. At first I had the extremity made straight, but thinking that in depressing the handle it might be caught by a projecting fold in the bladder, which would considerably embarrass the operator, I had the point slightly curved upwards, and as the knife is never introduced so far into the bladder as to reach the curve, it will cause no difficulty in its introduction. The groove is made somewhat deeper than in the common staff, to prevent any risk of the knife slipping out. The extremity is not grooved, but rounded like a common sound, to prevent abrasion of the prostate or mucous lining of the bladder. The handle is somewhat larger, to afford a better purchase to the hand of the operator."

Now, in perusing this piece of information, the first reflection that occurs, is the singular methods which some men take to get the character of inventors and of original contrivance. Is it to be supposed that Mr. Key is ignorant of the fact, that the practicability of introducing the very instrument which he delineates, and of which he claims the invention has been well known to surgeons both in Paris and in London for several years? If he is, it is difficult to understand how he has been

spending his time ; for almost every one that takes any interest in the surgery of vesical and urethral diseases, knows well the experiments of Stanley in London, and of Amussat, Caviglia, and Leroy in Paris.

That the true state of information on this point may not be as little known to our readers as Mr. Key seems to make it, we request their attention to the following details from M. Troussel, on the practice of using the straight catheter, introduced by M. Amussat, upwards of three years ago at least.

"In March, 1822," says M. Troussel, "I was summoned to a patient in the *Rue de Sevres*, No. 104, with an extensive urinous abscess. I attempted in vain to introduce a curved sound, which could not be made to pass the obstruction in the bulbous part of the urethra. M. Amussat being requested to see the patient, succeeded in introducing into the bladder a sound *perfectly straight*. During the whole course of the disease, we used *straight sounds*, which were always introduced with the greatest facility, notwithstanding the opposition of the patient, who having been formerly treated for urethral fistula at la Charite, was very reluctant to allow any instrument of a different form from those used in that hospital to be employed. From this period I have used *straight sounds* only ; and I have invariably introduced them with the greatest facility. I sound in this manner with more confidence, and I have therefore renounced the use of curved instruments, whether made of metal or of elastic gum.

"Among the numerous advantages resulting from the straight sound, I adduce the following. 1st, It renders the operation of catheterism much easier and less dangerous ; it enables all physicians and surgeons, however little accustomed to the operation to perform it readily, by merely remembering the direction of the urethra. It is almost impossible with a straight sound to make a false passage, without quitting the known direction of the canal, and thrusting it forward violently ; while it is easy to pierce the urethra, and make a false passage in the motion of depression, or gliding when the point of a curved instrument is under the *symphysis pubis*. 2d. The operator may always know exactly the situation of the point of the instrument, from the direction of its body, or that part which has not yet entered the urethra. 3d. The operator may always in cases of stricture act with a straight sound, as he would with a flexible one ; that is, he may cause it to revolve on its axis between his fingers, while he keeps it applied to the obstructing point, in the known direction of the canal, and by putting it on the stretch with the other hand. 4th. He

may substitute for a silver catheter an elastic gum one, open at both ends, by using the first as a straight piercer. The apparatus, which is simple, consists of a straight catheter, broken an inch and a half below its open end, so as to unscrew the upper part of a catheter already introduced, and screw on the piercer (mandrin) in its place. It thus forms a long straight rod, upon which the flexible catheter may be slipped, by turning it between the fingers, and pushing it gently forward till it enters the bladder; when it is easy to withdraw the metallic sound to which the piercer continues firmly screwed."

"I insist," says M. Troussel, "on the denomination *straight sound*, because often this name is applied to sounds which are but slightly curved, or are similar to those suited to the female urethra."

If he is aware of these experiments, it is impossible to reprobate too strongly the spirit in which this pretended invention is claimed.

Of the more than insinuation that Mr. Key is the first to use a scalpel, or to recommend its use, it is scarcely requisite to speak. We can hardly imagine him to be serious in talking in this manner of an instrument which he cannot fail to know was virtually used by Cheselden, which he must well know Sir Astley Cooper has often employed, and which we know has been used more than once in this city. It matters not whether it be a scalpel with button or without button, with long blade or short blade, strong back or slender; it still is, to all intents and purposes, the ordinary straight scalpel used in all surgical operations. This method of explaining the principles, and improving the performance of surgical operations, betrays either remarkable ignorance of the history of the art, or a spirit in which candour has no share.

We have now remarked the principal points worthy of attention in this Treatise on Lithotomy. We cannot discover any thing peculiar in the author's description of the mode in which he operates, or any circumstance which is not already well known to those who have studied the operation. However much we agree with the author in his opinion on the principle of the operation, we cannot perceive that he has been fortunate in his manner of unfolding it. In truth, there is not a single attempt, through the whole of its splendid pages, to demonstrate these principles on anatomical facts; and perusal of the work sadly contradicts the professions held out in the title-page and preface. Even the engravings do not give views which we should term natural of the parts concerned in the operation; and we should much prefer the short but

clear observations of Dr. Colles, as a guide in dissecting them and studying the operation, than the desultory but assuming instructions of the author before us.

This book is introduced before the world with a degree of pomp and magnificence which the nature of its contents does not render particularly becoming. It consists of thirty-four quarto pages, printed in close imitation of the work of Sir Astley Cooper on Dislocations and Fractures, in a large beautiful character, with plenteous space and ample margin.—The contrast between all this pomp and circumstance of authorship, and the homely nature of the contents, is so striking, that it involuntarily suggests the shrewd remark of Bassanio—“Gratiano speaks an infinite deal of nothing, more than any man in Venice ; his reasons are as two grains of wheat hid in two bushels of chaff ; you shall seek all day ere you find them ; and when you have them, they are not worth the search.”

MONTHLY SUMMARY OF PRACTICAL MEDICINE.

I. ANATOMY AND PHYSIOLOGY.

M. WESTRUMB's *Experiments on the Direct Passage of Substances into the Blood.*

Although the frequently repeated experiments of Flandrin, Magendie, Maxen, Gmelin, and Tiedemann, leave little doubt as to the direct passage of many substances into the venous system, it gives us additional pleasure to notice a further confirmation of them by a skilful physiologist, M. Westrumb, of Hamelin. His experiments are the following:—The sulphuretted hydrocyanate of potass, indigo, rhubarb, oil of turpentine, were injected into the stomach of dogs and sheep ; and after various intervals of time, the animals were killed and carefully examined. When a mixture of indigo and oil of turpentine had been used, and the animal was killed five hours after the beginning of the experiment, the two substances were fairly manifested to the sight and smell in the whole tract of the intestines, as well as in the blood of the vena porta, in the substance of the lungs, liver, and kidneys,

and in the urine ; but not a vestige could be recognised in the glands of the mesentery, or in the chyle. The oil of turpentine, and the hydrocyanate of potass were given to a sheep in repeated doses during four days, and it was killed half an hour after the last dose. Neither of these easily detected substances could be found in the lymphatic vessels or glands of the mesentery, or the thoracic duct ; but both of them were very obvious in the liver, kidneys, spleen, and blood of the vena porta. Similar results were obtained with the decoction of rhubarb, and the sulphuretted hydrocyanate of potass. Tying the thoracic duct near its termination did not alter the phenomena. The researches of Westrumb likewise confirm those of former experimenters, as to the extreme rapidity of the venous absorption. He detected rhubarb in his own urine five minutes after swallowing an ounce of its infusion ; and after the same period in rabbits, but not earlier. Half a grain of the hydrocyanate of potass given to a little dog, became sensible in the urine *at the end of two minutes*.—*Anderson's Quarterly Journal*.

II. SURGERY AND MIDWIFERY.

DR. WEBSTER on Acupuncturation.

In compliance with your request, I send an account of the case in which acupuncturation was performed with the most decided benefit. It is the only instance wherein I have had recourse to the operation ; but, while such opposite opinions exist with regard to the utility of the remedy, even one proof of its efficacy may not be altogether without interest.

10th February, 1825.—Mrs. Good, æt. thirty-two years, married, and in the sixth month of pregnancy, became a patient at the St. George's and St. James's Dispensary. On admission, it was stated that, about four months previously, she had been bled in the right arm, in consequence of a pain in the head, accompanied with giddiness. At the moment the vein was opened, she felt a most excruciating pain, very different from what she had previously experienced from the operation. Whilst the blood was flowing, she fainted, and continued in a swooning state for nearly an hour. The wound healed kindly, and during a week afterwards she was free from complaint. About the end of that time, she suddenly experienced a severe pain, proceeding from the bend of the elbow, and extending down the inner side of the right

forearm, in the course of the inner cutaneous nerve, to the hand ; the two fore-fingers and thumb were also similarly affected. This pain was most severely felt about two inches below the inner condyl of the humerus, and in the muscles composing the fleshy part of the thumb. There was also a prickling sensation at the points of the fingers ; and she complained of a pain situated near the spinous process of the right scapula. "These symptoms," it is mentioned in the notes of the case, "have continued ever since, and have gradually increased in severity. At present, the pain is more excruciating than ever, especially in the upper part of the forearm and in the cicatrix of the vein, but it never extends above this point ; nor has there been any swelling or puffiness of the limb, of which she has now almost lost the use. She feels always worse during the night, particularly when warm in bed. Was never affected with rheumatism, and her general health is good, although the tongue is slightly furred, and the bowels are a little costive."

Before admission, some aperient medicines had been prescribed, also a blister to the shoulder ; and pieces of flannel, soaked in spirits, had been applied to the forearm ; but from neither of these did she receive any benefit.

10th March.—During the last month has attended regularly at the Dispensary, and has taken aloetic purges, blue-pill, and colocynth ; also saline medicines, camphor, valerian, and asafoetida. Volatile alkali, camphor, and soap liniments, with tincture of opium, have been rubbed upon the forearm, and hot fomentations have been applied ; but all without the slightest effect in diminishing the pain. The only remedy that appeared to afford relief was a large blister, which extended from the bend of the arm to the wrist : whilst the discharge continued, the pain was rather alleviated ; but it afterwards became worse than before, and, to use her own words, "the agony was now so great, that she would allow her arm to be cut off, rather than bear it any longer."

Every remedy having failed, acupuncture was resolved upon. Accordingly, on the 13th, in the presence of Mr. Bacot, and gentlemen usually attending the Dispensary, Mr. David Duncan, an intelligent pupil, who had taken charge of the case from the beginning, introduced the needle at two different points in the upper and inner part of the forearm, for nearly three-fourths of an inch in depth. The same was done into the ball of the thumb, until the needle almost penetrated through the hand. The instrument was turned gently round at each introduction, but did not remain longer than fifteen

teen seconds at a time. No blood followed, and the patient felt little pain in consequence, except when the needle was introduced into the muscles of the thumb.

For two days after, the pain in the forehead and thumb continued without any diminution, and it was now accompanied by a feeling of great numbness of the limb. On the third day, the pain was much alleviated, and the numbness had ceased. Next morning, she felt quite free from pain or any other complaint.

On the 9th of May, she came to the Dispensary, according to promise: she had suffered no return of pain, and the arm is as well, and feels even stronger, than before the first attack. A fortnight after this, she was visited at her own house: she still continued free from any recurrence of the disease.—*Lon. Med. and Phys. Journal.*

Observations on the Treatment of Ganglion. By WILLIAM CUMIN, M. D., Surgeon to the Lock Hospital, Glasgow.

Having some time ago met with several cases of the tumour commonly termed Ganglion, I was disappointed to find, that the usual modes which are recommended by surgical authors for the removal of such swellings, were either irksome and ineffectual, or of too formidable a character to be readily agreed to by the patient, or in most cases conscientiously recommended by the surgeon. As these tumours are commonly seated in tendons, they cannot be extirpated without exposing the tendons; and should the wound not heal by adhesion, a tedious and even sloughing sore may be the consequence. Such an operation is very rarely had recourse to; and the common method of treating ganglia is, to strike them smartly with a book, and thus endeavour to rupture the sac, and disperse its contents. But the thickness of its walls often renders this impossible, without an improper degree of violence; and even when it has been accomplished, the swelling generally, after a short interval, returns. The procedure is besides in itself rude and painful, and altogether most unsurgical. It occurred to me, that by introducing a cataract needle obliquely through the skin, freely dividing the sac, and then pressing the contents into the cellular tissue, I should succeed more effectually, and with much less pain, in removing this disease, and that without any risk of inducing inflammation of the cavity. The sac itself seems to be very sparingly sup-

plied with absorbent vessels, for absorption very rarely if ever, takes place here, so as to effect a cure; while the cellular tissue into which the contents would be forced by the proposed operation, abounds with lymphatics. I had no opportunity of proving the efficacy of this plan until the month of November last, when a patient came under my care in the Lock Hospital, having a ganglion on the back of the wrist, which had been partially removed for a short time by means of a very smart blow.

Christian Liddel, admitted November 15th, 1824. November 22d.—The skin over the ganglion was to-day drawn firmly to one side, and a couching needle introduced into the tumour; the sac was freely divided, and the contents pressed into the surrounding cellular tissue. A small portion escaped through the external puncture, and presented exactly the appearance of the white of egg. Compress and bandage, solution of acetate of lead. December 2d.—Fluid is again collected in the ganglion. December, 20th.—The ganglion, which was much smaller than on the former occasion, was to-day emptied as before, by means of the couching needle. After this the fluid was daily pressed out of the sac into the surrounding cellular tissue, until the 24th, when only a very small quantity was found in it; and on that day she was dismissed cured, with directions to repeat the pressure daily for some time. I had an opportunity of seeing this patient at the hospital on the 21st February, 1825, and I could then detect no trace of the ganglion, excepting a slight thickening in the situation which it had occupied.

I have since had several other cases which have served to confirm me in the favourable opinion which I had formed of this mode of operating for ganglion. It is of consequence, after the operation, to apply a compress and bandage, and every morning to empty the tumour completely by pressure, and then reapply the bandage, until at length all remains of the disease have been removed. It does not seem probable, that the cure in such cases is accomplished by the obliteration of the sac, or the cessation of its power of secreting fluid; but by its gradual contraction, and the permanence of the opening in its side, through which any newly secreted fluid finds its way into the cellular tissue, and is there speedily absorbed.

But this simple operation is not equally well suited to every form of ganglion, indeed there are some in which it ought not to be performed. The favourable cases are those in which the tumour is tense and translucent, and rolls freely under the skin, showing that the cellular tissue is loose and healthy.

But should the prominence of the tumour be inconsiderable, and the skin covering it thickened or inflamed, the operation ought to be deferred until the parts are in a more favourable condition ; for, under the circumstances now mentioned, the sac cannot be freely divided, the cellular tissue will not readily receive the glairy contents, and the efforts used to force them out, will in all probability cause inflammation and suppuration of the sac. None of the patients on whom I have operated ever complained of pain from the introduction and movements of the needle ; one gentleman indeed even spoke of the latter as causing rather a pleasing sensation.

It has occurred to me, that a similar mode of operating might be applied to hydrocele ; and that a cure of that disease might be accomplished by opening a communication, by means of the cataract needle, between the cavity of the tunica vaginalis and the cellular tissue of the scrotum. No suitable opportunity has presented itself of putting this idea to the test of experiment ; but the trial is one which, in the hands of a cautious surgeon, would in all probability effect at least a temporary cure, and which could not be productive of any injurious or unpleasant consequences.—*Edin. Med. and Surg. Journal.*

Iodine for Carcinoma Uteri.

Among the organic diseases of the uterus, there were many cases of scirrhous and carcinoma of the uterus treated. Besides the generally recommended remedies, and employed without any agreeable result, the iodine was made use of in three cases. In two cases of scirrhous it was given internally, as tincture of iodine, according to the formula of Coindet, and in one only externally, in the shape of ointment, the hydriodate of potash. In all three cases this specific produced a powerful forcing influence upon the uterine system. Internally, notwithstanding it was given in small doses, it excited, besides other less important effects, a sensation of tension and painful pressure in the abdomen, and the hydriodate of potash rubbed on the abdomen increased very evidently the disposition to haemorrhage. Two patients have greatly improved, but are still under treatment. The third, on the other hand, who has taken the tincture of iodine, and injected circu-

ta and the leaves of the lauro-cerasus, may be considered as cured of the scirrhus of the os uteri.—*London Medical Repository.*

III. PATHOLOGY AND THERAPEUTICS.

Dr. JOHNSON'S case of Tympanites Pericardii.

Mr. Scott, of the Haymarket, aged about forty-seven, had, for three or four years, been declining in health, but had not been under regular medical superintendence, till a few weeks before his decease : no regular history of the complaint, therefore, could be obtained. He stated, however, that his appetite and strength had gradually declined, but his chief complaint was *a fluttering, a palpitation, and a sense of anxiety about the region of the heart, with disturbed sleep and frightful dreams.*

' When seen a few weeks before death, his countenance was like that of a person in a state of anaemia, except that there was also a chloritic tinge in the skin ; the pulse was full, quick, and irregular ; there was a tendency to œdema about the ankles ; the appetite was almost entirely gone, and the patient felt approaches to syncope on using any exertion, or ascending stairs. His mind was desponding, and temper irritable ; the motions from his bowels were perfectly healthy ; the chest in every part resounded remarkably well, and, in the region of the heart, *percussion* elicited as clear a sound as in any other part ; the *impulse* of the heart against the ribs was very feeble, and scarcely audible ; it was also irregular, in correspondence with the state of the pulse.'

The patient died suddenly in February last, and the following appearances are recorded by Dr. Johnson, as having been observed on examination after death; he was himself present.

' The body extenuated, but still there was some peculiarly yellow fat on the chest and abdomen ; the muscles, though wasted, were of a vivid red colour ; all the organs in the abdomen were sound ; on opening the chest, the lungs presented a beautiful blue appearance, sparingly mottled with white ; they were very sound. Between the lungs there presented itself a pellucid membrane distended with air. This was found to be the *pericardium*, reduced to a most extraordinary degree of tensity, and distended with a considerable quantity of air. The heart was small, not halffilling the pericardium, and

extremely degenerated in substance ; a great part of its muscular structure being converted into a kind of fat ; the whole was so lacerable as scarcely to bear handling ; the parietes of the left ventricle were not more than a quarter of an inch in thickness ; the internal surfaces of the cavities were pale, wasted, and not containing a single drop of blood ; neither was any blood to be seen in the large vessels issuing from the heart ; there was nothing particular in the vascular structure of this organ.

Dr. Johnson adds, "That he has met with several cases where the heart was in this degenerated condition, but never before observed *such a distension of the pericardium by air,*" that it is quite evident, from the size of the pericardium, and its extreme tensity, that this collection of air must have been of some standing, 'and that this phenomenon accounts for the region of the heart being as sonorous as any other part of the chest, which is not usually the case.'—*Med. Chir. Rev.*

Note.—This report is highly interesting, on account of the rarity of the disease to which it relates ; so rare, indeed, that Morgangi says he never saw an example of it, and D. Baillie seems to have been equally unfortunate.

M. GIPONTON'S Case of Pericarditis.

A printer entered the hospital on the 1st Pluviose, year seven of the Republic, having been ill five days, but previously in good health. On examination, he presented the following symptoms, viz. headache—some degree of facies hippocratica—circumscribed red spot on each cheek, more especially the left—tongue changed—some cough—abundant expectoration, slightly tinged with blood—respiration much embarrassed—sharp pain in the side, (point de cote,) extending from the left across the lower portion of the sternum to the right, and increased by pressure—obscure sound, on percussion, over a considerable space of the left side, almost the whole of the right side sounding well—constipation—scanty urine, of a turbid appearance, with red sediment—skin dry and burning hot—pulse feeble, small, quick, irregular, and intermittent.—Venesection, diluents. Two days passed without any remarkable changes, the countenance becoming daily more hippocratic. In the evenings there were exacerbations of the

symptoms. 5th. There was nausea added to the other phenomena. An emetic prescribed, not without dreading the consequence. It was determined to follow up this measure with tonics. The emetic did no good—the patient was entirely deprived of sleep, being obliged to sit constantly upright in bed. In this deplorable condition he lingered out some ten days more, and expired on the 23d day, from the invasion of the disease.

Dissection.—“The brain sound. On cutting through the ribs of the left side, a quantity of purulent matter escaped, evidently flowing from the cavity of the pericardium, which had been opened in the section of the ribs. The pericardium was of a very large size, and was computed to contain about a pint and a half of the purulent fluid. Its internal surface was coated with a thick layer of albuminous and puriform matter, with red spots interspersed. The heart was not enlarged, but its pericardial covering was thickened to the extent of two lines—a very unusual circumstance! The muscular structure of the organ did not appear to have undergone any change. The lung, on the left side, though much displaced by the enlarged pericardium, was otherwise sound. The lung on the right side was hepatized posteriorly, and covered with a lymphatic exudation. The interior coat of the stomach was inflamed and thickened throughout its whole extent, especially towards the pyloric orifice, which had the appearance of scirrhus. Externally, the stomach appeared quite sound.

“It is probable, as M. Tacheron observes, that the period of acute pericardial inflammation had passed before this man’s entrance into the hospital; and that purulent secretion or effusion had commenced, when, of course, the disease was incurable. The phenomena of the complaint, however, were strongly characteristic of its nature and seat—consequently the case is a valuable document, and worthy of record.”—*Anderson’s Quarterly Journal.*

M. PIED’S Case of Pericarditis.

Charles Lorrain, 43 years of age, of good constitution, and always having enjoyed excellent health, was seized, on the 20th of May, with difficulty of breathing—shivering—cough, with little expectoration—pain extending from the epigastrium to the right hypochondrium—fever, with exacerbation at

night. Received into the hospital on the 22d ; he presented the following symptoms, viz. face of a yellowish red colour—features contracted—slight convulsive motions of the fascial muscles—moist tongue, white in the middle—respiration very much impeded, laborious and quick—slight cough—trifling expectoration, of no particular character—no stool for two days—epigastrium and right hypochondrium painful on pressure—slight heat of skin—pulse small, contracted, quick, regular. Two bleedings from the arm—diluents—calmants. The pain in the parts above-mentioned was mitigated by the bleedings, and a blister removed it entirely ; but the other symptoms were not relieved. The night between the 23d and 24th was passed in a state of great agitation and delirium—and at four o'clock in the morning he expired."

Dissection.—“The left lung was sound, except that its inferior surface was covered with a recently formed crust of coagulable lymph. The inferior lobe of the right lung was similarly circumstanced, and, in addition, was engorged as after severe peripneumony. The whole of the thoracic surface of the diaphragm, and the posterior portion of the pleura were covered with an inflammatory crust, rather thin, and easily elevated, leaving the subjacent tissue reddish and injected.—The abdominal surface of the diaphragm was perfectly sound. The exterior surface of the pericardium was also covered with coagulable lymph, to a considerable extent, and the structure underneath very finely injected. The pericardium itself was filled with a serous, or whey-like fluid ; and some of the same fluid was extravasated in the cavity of the chest.—The internal surface of the pericardium, (both its loose and reflected portions) was covered with an inflammatory crust.—The muscular structure of the heart was sound.”

It is evident, says Dr. Johnson, that here we had an exquisite case of pericarditis, and yet some of the characteristic symptoms of the disease, as laid down by authors, were wanting, viz. syncopes, irregularity of pulse, burning pain in the region of the heart, &c. On the contrary, the pulse was regular ; there was no very violent pain in the region of the heart, and syncope did not exist.—*Anderson's Quarterly Journal.*

Paralysis, or loss of motion on one side, and loss of sensation on the other.

Francisco Cesario, thirty-five years of age, by trade a mason, and in good health, fell on his back in February or March, 1824, from a scaffold twenty feet high.

He was stunned for a few minutes by the fall, and on recovering his senses found that his left side, from the shoulder downwards, was deprived of all power of *voluntary motion*, but retained its sense of *feeling* unimpaired; whilst over the right side the power of *voluntary motion* was present, but *sensation* totally extinct.

Three months after the accident, the following report is made of his situation.

Pricking with needles, or pushing a lancet deep in the muscles of the right side, produced no sensation of pain or uneasiness, while over the left side the sense of feeling was morbidly increased.

The muscles of the right side were extremely prominent, powerful and perfectly under control; while those of the left were particularly flaccid, and much wasted, and no longer obedient to the will.

The temperature of the right side was one and a half degrees Reaum. (*equal to 33.8 Fahr.*) less than that of the left, which was rather greater than natural.

Although the sense of feeling was entirely lost on the right side, yet he could still with the right hand perceive the weight and consistency of external bodies; on the left side, the hand and foot were œdematosus.

From the fourth conical vertebra upwards, *sensation and motion* were perfect on both sides, and the line of demarcation was so exactly drawn that it might be defined by a packthread surrounding the neck.

The countenance was not expressive of either suffering or disease, nor were the energies of the mind in the slightest degree impaired; the breathing was but slightly affected, and the pulse in each arm was 70, soft, full, and regular; there was no headache or thirst, and the tongue was clean; the appetite had continued good through, but he could procure no motion without purgatives or enemata, and the faeces were invariably passed in small hard scybala, varying in colour from light clay to pitchy black. He slept little, but soundly; and the skin was soft, although he had never perspired, as he stated, since the accident; the urine, natural in quantity from the first, was passed with some degree of hesitation,

and deposited, when left to settle, a copious white cretaceous sediment.

The body stript and minutely examined, presented no appearance of violence or disease, but, on pressure, a slight degree of tenderness was felt at the tenth dorsal vetebra.

The preceding details are extracted from a communication in the last number of the *Edin. Med. Journ.* (April 1825,) which was received from Mr. Robert Dundas, surgeon to the British hospital at Bahia, under whose care the patient was for some time, and by whom various remedies were employed for his relief, but apparently with little benefit. The termination of the case is not yet known.—*London Medical Repository.*

IV. MATERIA MEDICA AND PHARMACY.

Conspectus of Prescriptions.

This is a neat, very closely printed little volume, uniform with Thomson's *Conspectus of the Pharmacopœias*, but of a very different structure from it. In this are given arranged tables of doses, under the head of Alteratives, Antacids, Astringents, &c., followed by numerous formulæ, selected from the best professional authorities, English and Foreign, whose names are added to each prescription. Our readers, however, will understand the plan better by a specimen of the work, which we shall take from the 22d Section, the first that has opened to us.

“XXII.—INJECTIONS

“Are medicated liquors, to throw into a natural or preternatural cavity of the body, by means of a syringe, as in gleet, gonorrhœa, &c.

Select Formulæ.

INJECTIO COPAIBÆ.

R. Capaibæ 3j.

Mucilag. gum. acaciæ 3ss.

Aq. rosæ 3vj.

Rub the copaiba and mucilage well together, and add the rose-water.

HUNTER.

INJECTIO CUPRI SULPHATIS.

R. Cupri sulphatis gr. vj.

Aquaæ distillatae 3ij.

Tinct. opii 3j.

Misce pro injectione.

ADAMS.

INJECTIO HYDRARGYRI.

- R. Unguent. hydrarg. 3j.
Olei olivæ 3j.
Misce.

This injection should be warmed previous to its use.

LAGNEAU.

INJECTIO HYDRARGYRI SUBMURIATIS.

- R. Hydrargyri submuriatis 3ij.
Mucilaginis acaciæ 3ss.
Liquor calcis oj.

Rub the submuriate and mucilage well together, and add gradually, the lime-water.

In Inflamed Urethra.

BLOOMFIELD.

INJECTIO PLUMBI CARBONATIS.

- R. Plumbi carbonatis 3j.
Tragacanthæ pulv. compos. 3ij.
Opii pulv. 3j.
Aquæ ferventi 0j.
Misce.

In the first stage of Gonorrhœa.

LAWRENCE.

INJECTIO THEÆ.

- R. Theæ viridis foliorum 3j.
Aquæ ferventis 3vj.
Macerate in a close vessel until cold, and strain.

In Gonorrhœa.

INJECTIO ZINCI SULPHATIS.

- R. Zinci sulphatis 3ss.
Aquæ distillatae 0j.
Misce.

CLARKE.

INJECTIO OLEOSA.

- R. Ol. amygdalæ 3iv.
Liq. plumbi subacetat. gutt. xxx.
Misce.

In the Inflammatory stage of Gonorrhœa.

PEARSON.

INJECTIO PLACENS.

- R. Aquæ puræ 3iv.
Solutio vino. opii gutt. 40.
Misce.

Idem.

BOYLE.

INJECTIO PLUMBI SUBACETATIS.

- R. Liq. plumbi subacetat. gutt. xx.
Aquæ rosæ 3vij.
Misce.

Idem.

BLANE.

INJECTIO THEÆ COMPOSITA.

- R. Infus. theæ virid. 3vj.
Liq. plumbi. acetat. gutt. xx.
Misce.

Idem.

GREGORY.

INJECTIO EMOLLIENS.

- R. Infus. lini. 3v.
Vin. opii gutt. xxx.
Misce.

INJECTIO AQUE CALCIS COMPOS.

- R. Aq. calcis 3iv.
Ol. olivar. 3ij.
Liq. acetat. plumbi gutt. xxij.

Misce pro injectione.

DUPUYTREN.

INJECTIO SULPHATIS ZINCI.

- R. Sulphat. zinci 9ij.
Aq. rosæ 3vij.

Misce.

HUNTER.

INJECTIO SULPHATIS ZINCI COMPOS.

- R. Plumbi acetatis gr. xx.
Sulphat. zinci gr. x.
Aq. distillat. 3vij.

Misce pro injectione.

ADAMS.

INJECTIO ALUMINIS.

- R. Aluminis 3j.
Aquæ rosæ 3iv.
Misce.

In Fistulæ, Gleets, &c.

CHESTER.

INJECTIO SULPHATIS CUPRI.

- R. Sulphatis cupri gr. viij.
Aq. puræ 3vij.
Misce.

Idem.

COOPER.

INJECTIO COPAIBÆ CUM CALCE.

- R. Bals. copaib. 3ij.
Mucilag. G. Arab. 3ss.
Misce et adde. Aq. calcis 3vj.
Fiat injectio.

In Ulceration of the Rectum, Urethra, or Vagina.

ABERNETHY.

INJECTIO OXYMUR. HYDRARG.

- R. Oxymuriat. hydrargyri gr. ij.
Muriat. ammoniæ gr. x.
Aq. distillat. 3x.
Fiat Injectio.

In Gonorrhœa.

CARMICHAEL.

INJECTIO STIMULANS.

- R. Bals. copaib. 3ij.
 Mucilag. Gum. acaciæ 3j.
 Misce in mortario et adde.
 Tincturæ lyttæ gutt. xij. MACGREGOR.

INJECTIO ACIDI MURIATICI.

- R. Aquæ distillatae 3jv.
 Acidi muriatichi gutt. viij.
 Misce.

In Gonorrhœa with Scalding Urine.

WYATT.

INJECTIO CUPRI AMMONIATI.

- R. Liquoris cupri ammon. gutt. xx.
 Aquæ rosæ 3jv.
 Misce.

In Gonorrhœa

FOOT.

INJECTIO QUERCUS.

- R. Decocti quercus ½j.
 Aluminis purificati 3ss.
 Misce.

In relaxation of the Rectum or Vagina.

COOPER."

We shall give you one other specimen, from the interesting Section on the New French Medicines.

"XXX.—NEW MEDICINES.

"In the preceding pages we have inserted a very few formulæ for the exhibition of the recently discovered vegetable alkalies, or as some choose to call them alkaloids; but as some of them have excited much interest, we shall give as full a list of them, in alphabetical order, as we could procure in the present stage of research. Our chief authority is M. Magendie, who has published a small work devoted to this subject, which has been translated into English, but in a form not very practical; as, instead of giving the apothecaries' weights and measures, the French are given with the corresponding troy weight, almost in every instance incumbered with decimal fractions.

ATROPINE.

"An alkali discovered by Brandes in the Atropa Belladonna, or deadly night-shade, and retaining its narcotic properties. Atropine is white, and forms salts with the acids. It has not yet been used medicinally.

BRUCINE.

An alkali extracted from the bark of the Brucea antidysenterica, or false Angustura, and found also in nux vomica. It is intensely bitter, but slightly soluble in water, and on cooling takes the consistency of wax. It forms neutral salts with the

acids. It is a narcotic, but about six times weaker than strychnine. The dose is from one to three grains.

PILULÆ BRUCINÆ.

R. Brucinæ gr. xxxvj.

Conservæ rosarum q. s.

Misce et fiant pilulæ No. xii. una pro dose.

In Paralysis.

DAUBUSSON.

TINCTURÆ BRUCINÆ.

R. Brucinæ gr. xvij.

Alcoholis (36°) 3j.

Fiat tinctura, cujus sumantur guttæ sex vel triginta pro dose.

In Muscular Debility.

MAGENDIE.

MISTURA BRUCINÆ.

R. Brucinæ gr. vj.

Aquæ distillatae 3ij.

Sacchari albi 3ij.

Fiat mistura, cochleare medium pro dose mane nocteque.

Stimulant in Paralysis.

DIEFFENBACK.

CATHARTINE.

An alkaline substance found by MM. Lassaigne and Feueulle, in the pods and leaves of senna. It is solid, yellowish brown, of a peculiar odour, and nauseously bitter. It is very soluble in water, alcohol, and ether. Not yet used medicinally.

CINCHONINE,

An alkali discovered by Dr. Duncan, junior, and found most abundantly in the grey Peruvian bark, or Cinchona Condaminea, though it is found in both the red and yellow bark. It is white, semi-transparent, and crystallizes in needles. Dissolved in water it has little taste, but is a strong bitter, dissolved in alcohol or acids, though less so than quinine, and it is also less powerful. It forms neutral salts with the acids.

SYRUPUS CINCHONINÆ.

R. Syrupi simplicis 1*lb*j.

Sulphatis cinchoninæ gr. xlviij.

Fiat syrupus: cochleare unum vel duo pro dose.

In Scrofula.

MAGENDIE.

VINUM CINCHONINÆ.

R. Vini Maderæ Oiss.

Sulphatis cinchoninæ gr. xvij.

Fiat solutio—unciae quatuor pro dose.

In Intermittents.

MAGENDIE.

CINCHONINÆ TINCTURA.

R. Sulphatis cinchoninæ gr. ix.

Alcoholis (sp. grov. 847.) 3j.

Fiat tinctura,—drachmæ duæ vel sex pro dose.

In Intermittents.

MAGENDIE.

CYTISINA,

An alkali found in the seed of the cytisus laburnum or pea-tree of our shrubberies, and supposed also to exist in Arnica Montana. It is bitter, and possesses emetic properties, but has not yet been used medicinally."

CROTUM TIGLIUM.

The oil from the seeds of this plant is not so much a new remedy as an old one, again brought into fashion as a powerful purgative. In some cases, a drop applied on the tongue has produced many loose, watery, stools, and one or two drops has sometimes brought on alarming hypercatharsis. Dr. Nimmœ, of Glasgow, makes a solution of the oil in alcohol, and exhibits it in the following form.

HAUSTUS OLEI CROTONIS.

R. Alcoholis crotonis, 3ss.

Syrupi simplicis.

Mucilaginis gum. acaciæ aa 3ij.

Aquæ distillatae 3ss.

Misce fiat haustus cum lacte sumendus.

In Delirium Tremens, Corpulence, &c

NIMMO.

PILULÆ OLEI CROTONIS.

R. Olei crotonis gutt. vj.

Micæ panis, q. s.

Fiant pilulæ No xij. una vel tres pro dose.

The pill is not a good form of the medicine, as it is too apt to concentrate in one place in the stomach.

MISTURA OLEI CROTONIS.

R. Olei crotonis gutt. ij.

Mucilaginis tragacanthæ 3j.

Sacchari albi q. s.

Tere in mortario, et fiat mistura.

In Constipation.

SMITH.

VEL.

R. Solutionis alcoholicæ olei crotonis 3ss.

Syrupi simplicis.

Mucilaginis gum. acaciæ, aa 3ij.

Misce.

CONWELL.

Croton oil is also used as an external application in rheumatism; and according to Conwell, a few drops rubbed upon the umbilicus will prove purgative.

DATURINE.

A new principle found by Brandes, in the Datura Stramo-

nium, and possessing its active properties; but our knowledge of it is still imperfect.

DELPHININE.

A new principle found by MM. Feneulle and Lassaigne, in Delphinium Staphisagria, or Stavesacre. It is white, inodorous, very bitter and acrid. Six grains proved fatal to a dog according to Orfila; but little more is known of it.

DIGITALINE.

An alkaline substance found by M. Le Rayer, in the leaves of the Digitalis Purpurea. It is inodorous, very bitter, very deliquescent, and very soluble in water, alcohol, and ether. It is the active principle of digitalis, and strongly poisonous.

EMETINE.

A new principle found by MM. Pelletier and Magendie, in the several species of ipecacuanha. It is bitter, inodorous, and without the nauseous taste of ipecacuanha. The dose is from a quarter of a grain to four grains or more, according to the constitution of the patient.

SYRUPUS EMETINÆ.

R. Syrupi simplicis, $\frac{1}{2}$ j.

Emetinæ coloratae gr. xvj.

Misce; uncia dimidia vel uncia una pro dose.

Employed as the Syrup of Ipecacuanha. MAGENDIE.

TROCHISCI EMETINÆ PURÆ.

R. Sacchari albi 3iv.

Emetinæ puræ gr. viij.

M. F. Trochisci, aa, gr. ix.

A grain of pure emetine may be given in a draught to produce vomiting; but as it is little soluble in water, it may be dissolved in sulphuric or acetic acid.

HAUSTUS EMETICUS.

R. Infusi florum tiliæ 3ijj.

Emetinæ puræ (solutæ in acidum nitricum) gr. j.

Syrupi althææ 3j.

Sum. cochl. modicum omne quart. hor. donec vomitand. productus sit. MAGENDIE.

SYRUPUS EMETINÆ PURÆ.

R. Syrupi simplicis $\frac{1}{2}$ j.

Emetinæ puræ gr. iv.

Misce; dosis cochlearia modica quo vel quatuor.

MAGENDIE.

MISTURA EMETICA.

R. Emetinæ coloratæ gr. iv.

Infusi florum aurantii tenuioris, 3ij.

Syrupi florum aurantii 3ss.

Misce; dosis cochleare modicum omni semihora.

MAGENDIE.

TROCHISCI EMETINÆ PECTORALES.

R. Sacchari albi 3iv.

Emetinæ coloratæ gr. xxxij.

M. F. Trochisci ana gr. ix. ; unus omne hora aut alter.

In Chronic Pulmonary Catarrhs, in Hooping-Cough, and in Chronic Diarrhœa.

MAGENDIE.

TROCHISCI EMETICÆ EMETINÆ.

R. Sacchari albi 3ij.

Emetinæ coloratæ gr. xxxij.

M. F. Trochisci ana, gr. xvij.

One of these lozenges taken fasting, is commonly sufficient to make a child vomit—three or four have the same effect in an adult.

MAGENDIE.

ÆSCULINE,

An alkali found by M. Curzoneri, in the *Æsculus Hippocastanum*, and supposed to be febrifuge.

GENTIANINE.

An alkali discovered in *Gentiana lutea*, by MM. Henry and Caventou. It is yellow, very bitter, aromatic, and inodorous. The dose is from two to four grains or more.

TINCTURA GENTIANINÆ.

R. Gentianinæ gr. v.

Alcoholis (903) 3j.

Misce,—drachma dimidia vel drachmæ duæ pro dose.

As a Tonic bitter.

MAGENDIE.

SYRUPUS GENTIANINÆ.

R. Gentianinæ, gr. xvj.

Syrupi simplicis, flj.

Misce—drachma una vel drachmæ tres pro dose.

In Scrofulous Affections, excellent.

MAGENDIE.

HYDROCYANIC ACID, OR PRUSSIC ACID.

This acid was first discovered by Scheele, in 1780, and first procured pure by M. Gay Lussac. It is liquid, colourless, and transparent, of a powerful deleterious odour, like that of bitter almonds, and of a taste at first cooling, but afterwards acrid and irritating. It is the most deadly poison known, a single drop, when pure, applied to the tongue of a strong dog, making it fall dead as if shot. The medicinal prussic acid is made by adding to the pure acid six times its

volume, or 8.5 times its weight of distilled water. Dose, from a quarter of a drop to two drops.

MISTURA PECTORALIS.

R. Acidi hydrocyanici medicinalis 3j.

Aqua distillatae $\frac{1}{2}$ j.

Sacchari albi 3jss.

Misce—cochl. modicum, mane nocteque.

In Nervous Coughs, Asthma, and Consumption. **MAGENDIE.**

POTIO PECTORALIS.

R. Acidi Hydrocyanici medicinalis gutt. xv.

Syrupi althaææ 3j

Infusi glecomœ hederaceæ 3ij

Misce—cochl. modicum mane nocteque.

In the same cases.

MAGENDIE.**SYRUPUS ACIDI HYDROCYANICI.**

R. Acidi hydrocyanici medicinalis 3j.

Syrupi desœcatæ $\frac{1}{2}$ j.

Misce et adde cum misturis pectoralibus: dosis 3j. ad 3ij.

MAGENDIE.**LOTIO ACIDI HYDROCYANICI.**

R. Acidi hydrocyanici medicinalis 3iv.

Spiritus vini rectificati 3j.

Aqua distillatae 3xss.

Misce ut fiat lotio.

In Impetigo, and Acne Rosacea. **A. T. THOMSON.**

Dr. Frisch, of Nyborg, has relieved the excruciating pains of cancer by this lotion.

GUTTÆ ACIDI HYDROCYANICI.

R. Acidi hydrocyanici præparati e foliis lauri cerassi distillatis.

Dosis guttæ triginta vel drachma una in quo vis vehiculo.

Sedative.

PARIS.**MISTURA POTASSII CYANURETI.**

R. Cyanurti potassi gr. ss—ad gr. j.

Syrupi limonis ozj.

Fiat mistura.

MAGENDIE.**MISTURA ZINCI CYANURETI.**

R. Cyanureti zinci gr. ss. ad gr. j.

Syrupi simplicis 3j

Fiat mistura.

Vermifuge.

MAGENDIE.**HYOSCYAMINE.**

An alkali found by M. Brandes, in the *Hyoscyamus Niger*, and containing its active properties. It has not yet been employed medicinally.

IODINE.

An elementary principle discovered in 1813, by M. Courtois.

in various species of sea-weed, such as fuci and ulvæ. The modes of preparing it are given in all the systems of Chemistry. Dose from one to three grains. It has chiefly been used in bronchocele, scirrhous, cartilaginous, and osseous tumours; in vicarious menstruation; in amenorrhœa; in threatening phthisis; in scrofulous ophthalmia; and in chronic cases of syphilis.

ÆTHER SULPHURICUS IODURETUS.

R. Ætheris sulphurici 3j.

Iodinæ puræ gr. vj.

Misce—Guttæ decem pro dose.

Thirty drops contain about one grain of iodine.

TINCTURA IODINÆ.

R. Iodinæ gr. xlviij.

Alcoholis 3j.

Solve, et sumatur æger gutt. decem tres quotidie.

In Bronchocele.

MAGENDIE.

Twenty drops contain a grain of iodine.

UNGUENTUM HYDRARG. PROTO-IODURETO.

R. Proto-iodureto hydrargyri 9j.

Adipis suillæ 3iss.

M. Fiat unguentum.

To hasten the cicatrization of inveterate venereal ulcers.

MAGENDIE.

UNGUENTUM HYDRARG. DEUTO-IODURETI.

R. Deuto-iodureti hydrargyri 5j.

Adipis suillæ oziss.

Fiat unguentum.

More active than the preceding, in the same cases.

A very small quantity only to be put upon the lint, and applied to the ulcers.

(*To be continued.*)

MR. ANNESLEY on the Use, and Abuse of Calomel.

Mr. Annesley commences his paper, by remarking it as singular, that after so many years experience in the use of calomel, and the great diversity of opinion yet prevailing on the subject, no investigation should have been entered upon, with a view to ascertain the direct effects of this medicine on the stomach and bowels, and the alterations it gives rise to in their secretions. He then proceeds to state his mode of administering the remedy, which was at one time, to give moderate quantities; but on perusing Dr. Johnson's work, he

was induced to alter his practice, and to substitute 20 grains for his former doses. The diseases he commonly employs it in are Fever, Dysentery, and Hepatitis; and he gives it in combination with two grains of opium every seven or eight hours, followed up by a brisk purgative. The mouth should never be affected; and when this takes place, Mr. A. conceives the salutary operation of Calomel is interrupted. With respect to a prevailing belief, that many constitutions in India are ruined by the use of this drug, if there be any truth in it, Mr. A. is disposed to attribute such deleterious influence to perseverance in small doses, after the necessity for using the medicine has ceased. His opinion is, that a large dose of Calomel acts as a sedative. With reference to ascertaining its direct effects, Mr. A. instituted a series of experiments on dogs, administering the drug to them in doses of one, two, and three drachms; and after a definite period, killing the animals, and inspecting carefully the stomach and intestines. The results he considers highly satisfactory; and they lead to the inference, that the natural state of the stomach and intestinal canal is high vascularity; and that the operation of the Calomel in large doses is opposed to inflammatory action. Hence is explained in some degree the effect of scruple doses of Calomel, in allaying irritability of stomach and vomiting, a circumstance which Mr. A. has often witnessed with astonishment. The operation of Calomel on the secreted matter of the intestines is both chemical and mechanical. It renders this more fluid, and imparts to it a blackish grey colour. The former property Mr. A. thinks may explain the benefit derived from Calomel in obstructions of the *ductus communis*. He makes some observations also on the change of colour produced by the admixture of Calomel with cystic bile; and concludes the paper by expressing a hope that the experiments detailed may lead to a farther investigation of the subject, and induce his fellow Members to turn their attention towards it.—*Edin. Med. and Surg. Journal.*

MEDICAL VARIETIES.

INTELLIGENCE RELATING TO THE MEDICAL SCIENCES.

M. BECLARD.

There is scarcely any kind of writing which is at once so interesting and useful to the reader, as the biography of emi-

nent men. A thousand exertions of talent, which all the eloquence of precept would never have excited, have been called forth by the power of example. The ambitious student, endued with the peculiar sensibility to impressions so frequently the attendant on genius, would sink under the labours, the difficulties, and the disgusts which beset his path, if he were not cheered by the recollection of the great men who have mastered all these obstacles, and attained the ‘bright temple’ of renown. The warmest conceptions of a noble and aspiring mind, would be chilled by the cold and common-place atmosphere of worldly converse, if they were not now and then cherished and vivified by the sun of glory which shines for ever on the busts of the departed great. The business, and the anxieties, and the necessities of life would utterly choke and destroy the good seed of industry, beyond what the short existence of ourselves might require, if there were not something attractive in the idea of being remembered after we are dead, and spoken of with praise; and if we did not occasionally contemplate the immortal fame of men, whose earthly hopes and fears have long been ended, and whose bodies have long been mouldered into the dust of the earth from which they sprung.

A biographical account of men distinguished in medicine and surgery, would, on every account, be an acceptable present to the profession; but its execution would require more extensive knowledge than is usually possessed by one individual, and a share of ‘retired leisure,’ which few are happy enough to enjoy. Such a work, whilst it might be made the best History of Physic that has ever been compiled, would have the effect of attaching men more strongly to a profession, adorned in every age by so many bright examples of united wisdom and virtue, and, by holding up the best examples of all that is requisite to form an estimable medical reputation, would both encourage and direct the inexperienced and the young.

France has to deplore the recent loss of M. Beclard, the greatest, perhaps, that, since the death of Bichat, has been sustained by Surgery. The Journals of that country have tendered their various homage to his public and private virtues, and his honoured remains were attended to the grave by a crowd which excited curiosity even in the procession-loving city of Paris. A few particulars relating to his life, selected from the different periodical publications of that capital, will, we are assured, be read with interest.

Beclard was the son of a respectable tradesman of Angers,

and was born in 1785. His parents had several other children, and Pierre-Augustine was at first destined to the same rank in life as themselves. The talents which he very early displayed, and his remarkable attachment to study, led them however, to promote his education to the utmost extent of their means. At that time Bichat was in the zenith of his glory, his name and his works were spoken of in every province, and the young Beclard felt that sort of envy, which, both in generous and aspiring minds is more allied to virtue than to vice. His aspirations were, however, for some time suppressed, by the vain attempts of his father and mother to subdue the ambition of the future anatomist into something more suitable to a tradesman : but after one or two unsuccessful trials to make him first a dealer in hardware, and then a merchant, and then a clerk in a waggon office, being assured by his successive masters that they could make nothing of him, the despairing old people allowed him to become a pupil at the *Hôtel-Dieu* at *Angers*. In this situation, the passion for study, which had been so fatal to his prospects in pursuits unconnected with science, was soon productive of the greatest effects ; and in 1808, after passing four years at the hospital of *Angers*, so as to acquire the esteem of all around him, he removed to Paris.

In the midst of the distinguished surgeons of the large hospitals of that city, his abilities soon became conspicuous ; he gained one anatomical honour after another, and was successively selected by M. Roux for the office of his assistant-lecturer (*répétiteur*,) at *la Charité* ; and chosen demonstrator to the *Faculty*, and *Chef des travaux anatomiques*. In 1813, on the occasion of being created Doctor in Surgery, he presented a thesis containing several original opinions in physiology and surgery. His progress was a little interrupted, by his failing to obtain the office of assistant-surgeon to the *Hôtel-Dieu* in 1815 ; but his merits were considered quite equal to those of M. Marjolin, the successful candidate, and three years afterwards he was elected by the votes of all his preceptors, and according to the wishes of all the pupils, to the chair of Anatomy in the Faculty of Medicine of Paris.

After attaining this important situation, he appears to have devoted his whole time and his whole soul to such a continued series of laborious studies, connected with his office of a teacher, as caused his lectures to be crowded with students, and eventually shortened his existence. Few men appear to have been more devoted to public duty, and more ardent in the pursuit of science, or more negligent of ornament, or

more careless of the emolument which might have been derived by attending less to his pupils and more to the public. As a lecturer, he was clear and precise, without being ambitious in his style. His conception was rapid and powerful, his memory extensive, his judgment correct, and his elocution agreeable. His hearers forgot the professor amidst the richness and the beauty of science which he displayed to them ; and some idea may be entertained of his industry by the fact, that, notwithstanding his great abilities and his long familiarity with his subject, the preparation for a single lecture, often occupied him four or five hours. He seems to have had a pure passion for science, unmixed with any strong desire for personal distinction ; to have welcomed knowledge, from whatever quarter or country it came to him ; and to have been uniformly more desirous to learn the truth, than to be the *discoverer* of it—an undoubted feature of a great mind.

His principal published works are, a memoir *sur les Acephales* : a memoir of considerable length *sur les Blessures des Vaisseaux* : a memoir on Osteology, the fruit of much observation and research : an essay on Embryology, published in the name of his brother : numerous experiments on local affections of the nerves, published in a thesis by M. Descot, in 1822 : and a work on General Anatomy, for the use of his pupils. He was the author of many articles in the different *Dictionnaires de Medecine* : and of several papers contained in the *Bulletins de la Societe d'Emulation* ; and other collections. He also edited the second edition of Bichat's *Anatomie Generale*, adding many observations of his own : assisted by M. Jules Cloquet, he translated Mr. Lawrence's work on Hernia into the French language ; and in conjunction with the same author he had commenced a series of anatomical plates.

It is gratifying to find that his private character was no less distinguished by virtues, than his public character by talent and labour. He was not naturally of a communicative disposition in conversation, but when a stranger had got over the coldness of his exterior, he invariably found him obliging, and ready to aid others by his advice, his knowledge, and access to his valuable library. As a public examiner of pupils, he was just, without undue severity ; and, in that department of duty, repaired many abuses which had been greatly complained of. When it was thought proper, for political reasons, to re-organise the Faculte de Medicine in 1823, very general anxiety was felt for the probable removal of M. Beclard from his office ; but, notwithstanding some intrigue and ma-

nœuvring, the commanding merit of the professor preserved him his chair in the newly-modelled school. As a son, a husband, a father, a brother, and a friend, he seems to have been rich in amiable qualities, and eminently beloved.

In the midst of his labours and his duties, in the height of his fame, and in the prime of his life, he was attacked by a disease which, in eleven days, deprived his family of his protection, and his pupils and his country of his services. His too great assiduity in his pursuits had, for some time, been apparently productive of a kind of chronic inflammation of the stomach; to this succeeded an acute cerebral affection, accompanied with erysipelas, which, notwithstanding all that art and all that friendship could suggest, was fatal. He is said to have described the nature of his complaint in a very collected manner to those around him, and his description was found correct, on examination after death. With every thing to attach him to life, and every capability of enjoying existence, he saw the sure approach of death, and met it with becoming firmness and resignation.

His funeral was attended by an immense concourse of students, all anxious to express their respect for the memory of a man whose life had been consecrated to their improvement. The Faculty of Medicine, deputations from the Royal Academy, and the different societies of medicine, and a crowd of colleagues and friends, accompanied the procession to the cemetery of Pere La Chaise, and in this beautiful but fanciful place of repose for the dead, various honours were paid to the defunct, not without some admixture of that theatrical display which a Frenchman cannot help mixing with all affairs of life and death. For instance, first M. Pelletan, in the name of the Faculty of Medicine, then M. Pariset, in the name of the Section of Surgery, then M. Adelon, in the name of the numerous friends of the deceased; and, lastly, a young pupil, in the name of the rest of the pupils; deplored the end of a life which had been so useful and so short, and enumerated the talents and virtues of the dead.

M. Richerand was to have spoken for the Faculty of Medicine, but was unable to do so; and M. Pelletan being called upon on the spot, delivered a kind of funeral oration extemporaneously, and with much feeling. The following extracts are given in the *Revue Medicale*; and, making the necessary allowances for national taste and habitudes, are not without interest to all men who aspire to posthumous honours by honourable means.

• Beclard! thou hast been our colleague, our associate, our

friend. The Faculty of Medicine had selected from among us him whom thou lovedst the most, to express in this place the feelings of us all. But he has been overcome by his grief, and unable to follow us ; yet the regrets of the faculty shall not be silent, although his voice has been suppressed by tears.

‘ How brilliant, but how short, hath been thy career ! Distinguished among thy fellow-students whilst yet a pupil, thy reputation was established by numerous proofs. Early elevated to the rank of professor, thou wert a model for others to form themselves by. Justness of thought, excellence as a lecturer, wisdom of opinions, profound erudition, indefatigable zeal for science,—all these precious qualities, from which we were daily profiting, were united and ennobled in thee by their union with good faith, with disinterestedness, with humanity.

‘ I see, in this immense crowd, more than one unfortunate being whom gratitude has brought hither, that through the close and far-extended ranks of thy pupils, he may at least catch a sight of thy tomb.

‘ But what are my broken sentences—what are these words lost in the air, when all that they would convey is a thousand times more imposingly expressed by the spectacle around us ! Thy colleagues and thy friends have been unwilling to part from thee until the last moment. The immense assemblage round thy grave, the faculty, with all its professors, with all its fellows, with all its numerous pupils, so many distinguished men, so many weeping friends, declare the loss we have suffered, and the void which has been made among us. And when I turn from these to thy despairing family, where would they find consolation, if their private sorrows were not softened and mitigated by this great expression of the public grief ?

‘ Farewell, then, Beclard ! thou art worthy of our praises, for thy friends were many : we will preserve thy remembrance : thou has bequeathed to us thy example.’

The pupils of the deceased professor, who had insisted on bearing his coffin on their own shoulders to the grave, relieving each other by turns, terminated their pious offices by covering the precious remains with earth, and closing the grave with their own hands.—*London Med. Repository.*

M. GRIMAUD on the Oil of *Euphorbia Lathyris*.

M. Grimaud gave account to the Royal Academy of Medicine of Paris, at their meeting of the 21st of February, of the experiments of Dr. Calderini, on the oil of the *Euphorbia Lathyris*, which is eminently purgative. M. Grimaud mentioned that he had repeated the experiments of the Italian Physician, and that he considered this oil preferable, in many respects, to that of the croton tiglum. The dose is from four to eight drops, for an adult.—*London Med. Repository*.

History and Analysis of the Pitoya Bark.

The attention of Mr. Von Bergen, druggist in Hamburg, who has been long engaged in a Monography of Cinchona barks, was excited by a paragraph in the Times, London newspaper, intimating, that a quantity of Pitoya bark, which the Colombians esteem as equal, if not superior to Cinchona, was to be sent to England through the intervention of Mr. Henderson, British Consul-general at Bogota. Mr. Von Bergen accordingly procured a quantity of Pitoya bark from Liverpool. At first inspection, he perceived that it was not a new substance, but had already been publicly sold by auction, in Hamburg, in 1817 and 1821, at the same low prices that were given for the *China nova*, or false cinchona, and had been imported from London under the common name of Peruvian bark. On further investigation, he is also inclined to believe the Pitoya bark to be identical with a bark noticed by Mr. Lambert in his Description of the Genus Cinchona (1797,) who had received it from Mr. Brown, under the name of Tecamez bark. It is afterwards noticed by Humboldt, who doubts whether it be furnished by a Cinchona, and says that it should be called *Cascarilla of Atacamez*, from a village on the coast of the South Sea, between Rio Verde and Rio Es-maraldita.

In opposition to this conjecture of Mr. Von Bergen, we must notice, that the *habitat* of Atacamez bark is on the sea-coast of the province of Quito, in Peru; whereas the Pitoya bark comes from the neighbourhood of Bogota, on the east side of the ridge of the Andes, and grows probably at a much greater height.

Mr. Von Sanden, who superintends a manufactory of Quinia and Cinchonia, subjected the Pitoya bark to a careful

analysis. The decoction destroyed the colour of litmus paper, whereas it is reddened by all the Cinchonas. It caused no precipitate with infusion of tan or solution of tartar emetic, whereas few Cinchona solutions are not rendered turbid by them. Sulphates of iron gave a greenish brown precipitate ; with genuine Cinchona it is a purer green. Oxalate of ammonia caused slight turbidity, in which it agrees with true Cinchona. Tincture of gall-nuts caused a great precipitation, indicating gelatine and starch ; but this property is not peculiar to the Pitoya and Cinchona barks. To ascertain whether Pitoya bark contained quinia and cinchonia, it was boiled in water acidulated with sulphuric acid ; the decoctions were supersaturated with slackened lime ; and the precipitate dried, powdered and boiled in alcohol of 80° (sp. gr. 0.850 ?). The tinctures passed the filter with difficulty, had a reddish colour, like diluted tincture of saffron, and on evaporation left a granular resinous mass. To separate any quinia from cinchonia, if they were present, alcohol of 60° (sp. gr. 0.900 ?) was poured on, in which it was entirely dissolved, showing that there was no cinchonia. This tincture was alkaline by the tests of rhubarb and reddened litmus paper ; its residuum, when again evaporated, was almost entirely dissolved in diluted sulphuric acid ; but when tried by tincture of gall-nuts for quinia, yielded no precipitate. Therefore, so far as it can be determined by chemical analysis, the Pitoya bark is not the produce of a true Cinchona, and will not prove a substitute for the cure of intermittent fever.—*Ed. Med. and Surg. Jour.*